UNITED STATES INTERNATIONAL TRADE COMMISSION

In the Matter of:

CERTAIN COLOR INTRAORAL SCANNERS

AND RELATED HARDWARE AND SOFTWARE

) Investigation No.:

337-TA-1091

OPEN SESSIONS

Pages: 633 – 911 (with excerpts)

Place: Washington, D.C.

Date: Wednesday, September 19, 2018

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1	UNITED STATES OF AMERICA
2	BEFORE THE
3	INTERNATIONAL TRADE COMMISSION
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5	x
6	IN THE MATTER OF: : Investigation Number
7	CERTAIN COLOR INTRAORAL SCANNERS : 337-TA-1091
8	AND RELATED HARDWARE AND SOFTWARE :
9	x
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11	
12	HEARING
13	DAY 4
14	ž.
15	
16	Wednesday, September 19, 2018
17	Courtroom A
18	U.S. International Trade Commission
19	500 E Street SW
20	Washington, DC
21	
22	The hearing commenced, pursuant to notice of the
23	Judge, at 9:00 a.m., before the Honorable CLARK CHENEY,
24	Administrative Law Judge for the United States
25	International Trade Commission.

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1	PROCEEDINGS
2	JUDGE CHENEY: Good morning, everyone. Please
3	take your seats. We're on the record in Investigation
4	1091. We're in the middle of the evidentiary hearing. We
5	left off yesterday with the examination of Dr. Stevenson.
6	Before we resume that examination today
7	MR. JACOBS: Your Honor, we had concluded the
8	discussion with Dr. Stevenson. We were talking with
9	Mr. Bakewell when we left off yesterday on direct.
10	JUDGE CHENEY: Thank you very much for
11	correcting me. Yes, we did get Mr. Bakewell going. And do
12	we have any housekeeping matters to talk about before we
13	resume that testimony today?
14	MR. JACOBS: Not on behalf of Complainant, Your
15	Honor.
16	MR. SHAW: Nor from Respondents, Your Honor.
17	JUDGE CHENEY: No exhibits need to be moved into
18	evidence?
19	MR. SHAW: Your Honor, there was a list that was
20	sent over last night. It was a little late and we're still
21	reviewing them, so we've agreed to meet and confer at a
22	break and we'll move them in as soon as we have a chance to
23	finish our review of the list.
24	JUDGE CHENEY: Anything to add to that, Mr.
25	Stocketill?

1 MR. STOCKSTILL: No. Complainants have the list that they believe should be moved in, and we understand 2 Respondents are still considering. 4 JUDGE CHENEY: Okay. Thank you for your efforts to make that as coordinated as possible. 5 6 So we're ready to go with Mr. Bakewell? Mr. Bakewell, will you please return to the 7 witness box. As you're making your way up, I'll remind you that you're still under oath. 9 10 W. CHRISTOPHER BAKEWELL, having been previous duly sworn, was examined and testified 11 as follows: 12 DIRECT EXAMINATION (CONTINUED) 13 BY MS. ONDRICK: Welcome back, Mr. Bakewell. If we could put 16 CDX-9.15 up on the screen, I wanted to take care of one quick housekeeping item. For the record --18 MS. ONDRICK: Can we go on the confidential record? Align confidential. 19 20 JUDGE CHENEY: This is Align confidential information. If you're not authorized to view that, please 21 22 leave the hearing room. 23 (Confidential session follows.) 24 25

1	OPEN SESSION CONTINUED
2	THE WITNESS: Should I answer the question?
3	JUDGE CHENEY: We're on the public record, and
4	the pending question is, Can we go to the next slide.
5	A Yes.
6	Q What are you showing here at CDX-9.52?
7	A This summarizes the issues with bond that make
8	it not possible to do a product comparison in a way that
9	yields a royalty rate.
10	The companies fundamentally have different
11	business models even though they compete with one another
12	3Shape sells through distributors, whereas Align has a
13	direct sales model.
14	Diversions, both companies have different
15	versions of their products.
16	And then Align, as we've heard a lot about,
17	tries to create value by combining its scanners and
18	Invisalign system together. 3Shape's business model is
19	very different in that it seeks to leverage the value of
20	scanners and doesn't have the same digital ecosystem type
21	of model that Align does.
22	Q Under what circumstances do you understand a
23	reasonable royalty approach to be appropriate?
24	A Well, you need reliable data to do a product
25	comparison. Neither myself nor Respondents' expert,

- 1 Mr. Green, have been able to find that sort of product.
- 2 comparison information.
- 3 And then you need -- or in the alternative, you
- 4 would need some sort of reasonable royalty analysis, and
- 5 neither he nor I found the evidence that would permit that
- 6 either.
- 7 Q Did you review any licenses?
- 8 A There's one license, yes.
- 9 Q And was that a comparable license?
- 10 A No. It's different, involves different
- 11 technology, and it's a related party intercompany
- 12 agreement. That's very different than the situation here.
- 13 Q Is it your opinion that a bond rate cannot be
- 14 readily calculated using a reasonable royalty analysis?
- 15 A Yes.
- 16 O And do you believe that a 100 percent bond is
- 17 appropriate?
- 18 A Well, it would follow up. Ultimately, it's up
- 19 to the Commission to make that determination. But as I
- 20 understand the way the process works, it would follow that
- 21 that's the decision that will be made, as I understand the
- 22 process.
- Q Okay. And if we could go to CDX-9.53.
- And so this is the list of exhibits that we just
- 25 called out and counsel objected to that basically summarize

1 the groupings and the financial analysis and data that you analyzed in this case, correct? A 3 Yes. Q And if we could go to CDX-9.4, what does this 5 slide show? This provides a summary of the exhibits that A 6 were referenced in the slides that we discussed earlier and 8 in my analyses. 9 Q And have we covered all your opinions in this 10 case? A I believe so, yes. MS. ONDRICK: I pass the witness. JUDGE CHENEY: Is there cross-examination for 13 .14 Mr. Bakewell? MR. GANGULY: Yes, Your Honor, there is. 15 Can we go to CDX-9.18, please. 16 And, Your Honor, we would request to go on the 17 18 confidential record. This is Align confidential financial 19 information. JUDGE CHENEY: Okay. 20 (Confidential session follows.) 21 22 23 24 25

T	OPEN SESSION CONTINUED
2	JUDGE CHENEY: That's all the questions I have.
3	Might make sense to take our break for the morning. Will
4	there be redirect?
5	MS. ONDRICK: There is.
6	JUDGE CHENEY: I'll remind you during the break
7	not to discuss your testimony with anyone. We will resume
8	at 10:57. We're off the record.
9	(Recess from 10:43 a.m. until 10:58 a.m.)
10	JUDGE CHENEY: We're back on the record in
11	Investigation back on the public record in Investigation
12	337-TA-1091, Certain Color Intraoral Scanners and Related
13	Hardware and Software.
14	Before the break I had asked Mr. Bakewell some
15	questions, and now I think we're going to have some
16	redirect by Align.
17	REDIRECT EXAMINATION
18	BY MS. ONDRICK:
19	Q Mr. Bakewell, as to segment reporting or
20	activities-based costing, which better captures how
21	companies allocate their resources between products?
22	A I think they're both valid. I think that for
23	this exercise, the activities-based costing types of
24	analyses are maybe a little more insightful. But I think
25	they both provide insight into the business and how it's

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run.
  1
  2
                And why do you say the activities-based costing
     is better?
          A
               Because --
                Or more insightful, I should say.
  5
               Well, it's additional work beyond what's in the
  6
     financial statements, and we're getting more insight into
     the business by talking to managers about what they do and
  9 what the numbers mean and how value is created. We're
     asking questions in that exercise that relate to specific
10
     investments, which I think is what the ITC ultimately wants
11
 12
     to know is what the drivers are behind those specific
     investments. And you don't have that level of granularity
13
      in the financial statements and in financial accounting.
 14
      So it just provides more -- kind of a deeper dive into the
 15
     numbers and provides additional context.
 16
                Counsel asked you some questions about some of
 17
      your comparison slides showing further significance, and
 18
19
      counsel asked you if those slides showed both DI products.
20
                Do you recall that?
21
          A
                Yes.
                Did you do comparisons for each DI product as
 22
 23 well?
                Yes, I did.
 24
          A
                And were those at slides 47 and 48, if we could
 25
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1 put those up?
              JUDGE CHENEY: We're on the public record.
3
              MS. ONDRICK: Can we please go on the
  confidential record. Thank you, Your Honor.
             JUDGE CHENEY: This is Align confidential
 5
6 information?
             MS. ONDRICK: Yes.
              (Confidential session follows.)
8
9
10
11
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23
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1 OPEN SESSION CONTINUED 2 JUDGE CHENEY: Back on the public record. 3 BY MS. ONDRICK: 4 Counsel also showed you Align's 10-K, and there were two facilities there that weren't called out in one of your slides. Do you recall identifying that? 6 A Yes. 8 Why were those two facilities in Amsterdam and 9 China not shown? Those are a little bit different. They 10 certainly exist, but those facilities are more oriented, as 11 I understand it, towards serving local markets, and are 12 less comparable. And I also have less information about 13 those. So the comparisons I didn't think were particularly 14 15 meaningful because of the differences, and then also the lack of information. So there's two reasons. 16 0 17 Okay. 18 MS. ONDRICK: And then, Your Honor, we also did not identify one exhibit on the exhibit march-through we 20 had. So CX-1360, which is the TechNavio report. Did you consider that in forming your opinions in this case? 23 A Yes. MS. ONDRICK: No further questions. 24 25 JUDGE CHENEY: Any other questions for this

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witness before he is released?
                MR. GANGULY: No, Your Honor.
 2
                JUDGE CHENEY: Okay.
 3
 4
                Thank you, Mr. Bakewell. I appreciate your
     testimony. You may be excused.
 5
 6
                THE WITNESS: Thank you.
                (Witness excused.)
 8
                JUDGE CHENEY: My understanding is that now
 9
     we're going to turn to the presentation of Respondents'
    witnesses. Is that right?
10
11
               MR. JACOBS: That's our understanding, Your
12
    Honor.
13
              JUDGE CHENEY: Respondents, please call your
14
    first witness.
               MR. SHAW: So, Your Honor, just for your
15
     information, we have met and conferred with the
16
     Complainants and we have made a slight change to the order
17
18
    of presentation of Respondents' fact witnesses. If you'd
    like me to, I'll let you know what that's going to be.
               JUDGE CHENEY: Is there an updated sheet that I
20
    should be looking at?
21
22
               MR. SHAW: We just agreed on this this morning,
    Your Honor, so the sheet has not been updated yet, but I
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JUDGE CHENEY: Okay.

24 can tell you the order.

25

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MR. SHAW: So our first witness is going to be
 1
     Dr. Rune Fisker, second is going to be Christoffer
 2
     Melchior, third is going to be Kristian Hansen, fourth is
 3
     going to be Alan Hyldal, and fifth is going to be Dr. Mike
 4
 5
     van der Poel. The parties have agreed that Mr. Tais
     Clausen is currently going to be moved to Friday, and we
     are still meeting and conferring about whether we are going
     to call him or not.
                JUDGE CHENEY: Okay.
 9
                MR. SHAW: So Respondents call Dr. Rune Fisker.
10
11
             JUDGE CHENEY: Please raise your right hand and
12
     I'll swear you in.
                (Oath administered.)
13
                JUDGE CHENEY: Please take a seat.
14
                Mr. Shaw, proceed when you're ready.
15
16
                            RUNE FISKER,
17
     having been first duly sworn, was examined and testified as
     follows:
18
19
                         DIRECT EXAMINATION
     BY MR. SHAW:
20
21
          Q
                Please state your name.
22
         A
                Rune Fisker.
23
          Q
                Who is your current employer, Dr. Fisker?
                3Shape A/S.
24
         A
```

25

Q

202-347-3700

Can you please briefly describe your educational

background? 1 I have a master and a Ph.D. in computer science 2 from Technical University of Denmark, and I also have an 3 executive MBA from Copenhagen Business School. 0 And how long have you worked for 3Shape? 5 Since 2000. I was the first employee. A 6 Q And what is your current title? VP of product strategy. Are you responsible for any of 3Shape's business 9 units currently? 11 A Yes. O Which ones? 12 A I'm responsible for the restorative lab business 13 unit and for the TRIOS restorative clinic business unit. When did 3Shape start thinking about entering Q 15 the dental industry? 16 It was right from the start, around 2000. 17 When did 3Shape start development of your first Q 18 19 dental product? Around 2003. A 20 Which product was that? 21 0 A This was a dental labs desktop scanner. 22 What is a dental lab desktop scanner? Q 23

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you scan the gypsum model or impressions of the patient's

You basically have a scanner on the desktop, and

teeth. 2 And does 3Shape still sell lab scanners? Q 3 A Yes. How does a lab scanner compare to a TRIOS 5 scanner? The lab scanner basically scans gypsum models or 6 A impressions of the patient teeth, where the TRIOS scanner scans directly in the mouth, intraorally. Is there any software associated with 3Shape's 9 10 lab scanners? A 11 Yes. What is that? 12 0 13 A This is called 3Shape Dental System. Can you describe 3Shape Dental System briefly? 0 14 15 Yeah, it's a CAD/CAM software where you can design restorative indications like crowns, bridges, 16 inlays, onlays, veneers, et cetera. 17 18 Did you look at any competitor's products in designing your dental lab scanners? Yes, we always look at competitor product to 20 make a better and more competitive and superior product. 21 22 And you mentioned before restorative dentistry. 23 Does restorative dentistry involve moving patients' teeth? No.

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Does Dental System software move patients'

25

0

1	teeth?	
2	Α	No.
3	Q	Does 3Shape have any software for orthodontics?
4	Α	Yes.
5		MR. JACOBS: Objection, leading, Your Honor.
6		JUDGE CHENEY: Overruled.
7	Q	What is that orthodontic software called?
8	A	This is called 3Shape Ortho System.
9	Q	Can a customer purchase Dental System without
10	also purcha	asing Ortho System?
11	. A	Yes. This is the typical case.
12	Q	And if a customer wanted both Dental System and
13	Ortho Syste	em, is that an option?
14	A	Yes. They can buy this as a bundle.
15	Q	When a customer purchases that Dental System and
16	Ortho Syste	em bundle, do the two software systems act as one
17	product?	
18	А	No, they remain independent.
19	Q	Can you please turn in your witness binder there
20	to Exhibit	JX-225C.
21	А	Yes.
22	Q	Do you recognize this document?
23	А	Yes.
24	Q	What is it?
25	A	This is the 3Shape Dental System 2017 user

- 1 manual.
- 2 Q Can you please turn to the Bates page
- 3 3Shape ITC 6317.
- 4 A Yes.
- 5 Q And on that page begins a table of indications.
- 6 Can you describe what are indications?
- 7 A So indications are the different treatments you
- 8 can use -- yeah, you can design with the Dental System.
- 9 Q And if you turn to Bates page 6318, one of the
- 10 indications is labeled Orthodontics/Orthodontic Appliances.
- 11 Do you know what that refers to?
- 12 A Yes. This refer to the Ortho System appliances
- 13 interface.
- 14 Q And in that case, the Ortho System appliances is
- 15 referred to -- or the Ortho System software, I'm sorry, is
- 16 referred to as an add-on. Can you describe what "add-on"
- 17 means in this case?
- 18 A Yeah, so you have the basic Dental System
- 19 packet, software packets, and then you have add-ons where
- 20 you can do additional designs.
- 21 Q Is there more than one type of add-on to Dental
- 22 System?
- 23 A Yeah. There are two types of add-ons, there are
- 24 the add-ons that is built in with the Dental System and
- 25 then the add-ons that are independent software packages.

Q And what is the difference between the built-in 2 add-ons and separate add-ons? This is basically that it's a separate -- yeah, 3 that you can -- that you build in as a part of the software 5 when they are in the -- they build in add-ons, and then you have the, again, the separate software packages that are 6 7 completely independent software packages. Which separate software packages are independent of Dental System but listed as add-ons there? It is the Ortho System and the Implant Studio. 10 Q Why do you call both the built-in add-ons and 11 12 the separate package add-ons in the manual? To make it easier to communicate to the 13 A customer, the end user. 14 O Does Dental System interface with 3Shape's Ortho 16 Analyzer software? 17 A No. Can Dental System invoke any orthodontic 18 workflows? 19 Yes. It can launch the Splint Designer. 20 A Does Dental System invoke any other orthodontic 0 21 workflows? 22 23 A No.

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A

Can you briefly describe the Splint Designer?

Yes. So Splint Designer is a CAD software for

- 1 designing dental splints. A splint is a small appliance, a
- 2 small device that you put between the teeth.
- MR. SHAW: Your Honor, we're going to need to go
- 4 on the 3Shape confidential record just to discuss a couple
- 5 software specifications quickly.
- JUDGE CHENEY: Is it at such a low level that
- 7 people that use 3Shape software wouldn't know it?
- MR. SHAW: The people who use the software would
- 9 know it, Your Honor, yes.
- JUDGE CHENEY: Aren't they members of the
- 11 public?
- MR. SHAW: Your Honor, can I confer with my
- 13 client for a second?
- JUDGE CHENEY: Sure.
- MR. SHAW: Thank you.
- We can stay on the public record, Your Honor.
- JUDGE CHENEY: Great. Thanks.
- 18 Q Can you please turn, Dr. Fisker, in your binder
- 19 to JX-223C.
- 20 A Yes.
- 21 O Do you recognize this document?
- 22 A Yes. This is the software specification for
- 23 Dental System 2017.
- Q Can you please turn to the Bates page 9379.
- 25 A Yes.

- 1 . Q And there's a box near the center of the page in
- 2 the third row labeled Orthodontics Interface. Do you
- 3 understand what orthodontics interface means in this
- 4 context?
- 5 A Yes. This is the Splint Designer.
- 6 Q And on that same page in JX-223C, the
- 7 Orthodontics Interface box mentions something called
- 8 SS0016. Do you understand what that is?
- 9 A Yes.
- 10 Q What is it?
- 11 A This is the software specification for that
- 12 particular orthodontic interface.
- Q Can you please turn in your witness binder to
- 14 JX-226C. Do you recognize this document, Dr. Fisker?
- 15 A Yes.
- 16 Q What is it?
- 17 A This is, again, the software specification for
- 18 the orthodontic interface we saw on the previous page.
- 19 Q And does Exhibit JX-226C indicate anything about
- 20 the scope of the orthodontics interface in Dental System?
- 21 A Yes. If you go a little bit on the lower part
- 22 of the page, something called orthodontic order creation
- 23 S2, and I'm just going to read it. The user must be able
- 24 to select the following orthodontic types for the order in
- 25 the order form module. And then it lists the types and it

- 1 says, only splints.
- 2 Q Is there anything else in JX-226C regarding the
- 3 scope of the orthodontics interface in Dental System?
- 4 A Yes. If you turn the page.
- 5 Q What does that indicate to you, sir?
- 6 A If you look again at S2.1, you can say it's
- 7 create an order with a splint indication. And again, it
- 8 shows that it can only do splints.
- 9 Under that verification protocol, are there any
- 10 other orthodontic indications tested besides splints?
- 11 A No.
- 12 Q Do you know why no other orthodontic indications
- 13 are tested?
- 14 A Because there are no other orthodontic
- 15 indications accessible from Dental System.
- 16 Q You mentioned that you're responsible for the
- 17 TRIOS business unit. Do you recall that?
- 18 A Yes.
- 19 Q Did you have any role in the development of
- 20 TRIOS?
- 21 A I was managing the development.
- 22 Q And what year did that development first start?
- 23 A 2007, 2008.
- 24 Q And at the start of TRIOS development, were any
- 25 other 3Shape employees involved?

- 1 A Yes. Engineer called Carsten Nielsen.
- 2 Q At some point in time did that change?
- 3 A Yes. We hired Mike van der Poel.
- 4 Q When was that?
- 5 A In early 2009.
- 6 Q How was the TRIOS development project going
- 7 before Dr. Van der Poel joined 3Shape?
- 8 A Very slow.
- 9 Q How did the project go after you hired Dr. Van
- 10 der Poel?
- 11 A. It really picked up.
- 12 O Why was that?
- 13 A Because Mike has a very strong background in
- 14 optics, so he has a Ph.D. and was also an associate
- 15 professor in optics.
- 16 O Did any 3Shape, Inc. employees provide any input
- 17 to TRIOS technical development?
- 18 A No.
- 19 Q Did any former Cadent or Align employees provide
- 20 any input to TRIOS technical development?
- 21 A No.
- 22 Q Did 3Shape copy any Cadent patents in developing
- 23 its TRIOS scanner?
- 24 A No.
- 25 Q Did 3Shape copy iTero in developing its TRIOS

1 scanner? A Did 3Shape review any competitor products during 3 development of TRIOS? 5 Yes. We always review products. So we reviewed -- were reviewing the market leader, which was 6 Sirona CEREC. We reviewed the 3M scanner, known as Brontes at that time. We reviewed the E40. 9 (Reporter interruption.) So we reviewed the CEREC system, which was the 10 market leader at that time. We reviewed the 3M scanner 11 known as Brontes at that time. We reviewed the E40 12 scanner. We reviewed also, of course, the iTero and 13 several other products like ImageT [ph] and so on. 15 Why did you review those competitive products? Because we believe it's very important product 16 management to review competitors, to build superior and 17 18 better products. When was the optical design of TRIOS decided 20 upon? 21 A Summer 2009. 22 Q How do you recall that? 23 Because it was a very important milestone and

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Did 3Shape ever purchase or obtain a

was shortly after Mike started.

24

25

Q

- 1 competitors' intraoral scanner before the optical design of
- 2 TRIOS was decided upon?
- 3 A No.
- 4 Q Subsequent to that, have you ever opened up any
- 5 competitive scanners?
- 6 A Yes.
- 7 Q And before the TRIOS optical design was decided
- 8 upon --
- 9 A No.
- 10 Q -- did you open up any competitive scanners?
- 11 A Not before the design was decided on.
- 12 Q And after the design was decided upon, which
- 13 competitive scanners did you open up?
- 14 A iTero and CEREC, Sirona CEREC.
- 15 Q I'd like to talk specifically about opening up
- 16 the iTero. How many times have you been involved in
- 17 opening up an iTero scanner?
- 18 A One time.
- 19 Q And when and where did that occur?
- 20 A This was in 2010, summer 2010, at Cordent in
- 21 Holland.
- Q What is Cordent?
- 23 A Cordent is our 3Shape re-seller in Holland.
- Q What did you do specifically during the review
- 25 of iTero at Cordent?

- 1 A We were scanning ourselves initially, and then
- 2 we opened up the handheld and the Cart.
- 3 O Did you open up the handheld far enough to see
- 4 the details of the optical system?
- 5 A No.
- 6 Q And why couldn't you open up the iTero far
- 7 enough to review the optical system?
- 8 A Because it should be fully functional
- 9 afterwards. Cordent was using it on a daily basis.
- 10 Q And at the end of your inspection, were you, in
- 11 fact, able to put the iTero back together so that it was
- 12 functional?
- 13 A Yes.
- 14 Q Are you familiar with 3Shape's R&D and product
- 15 development efforts for TRIOS?
- 16 A Yes.
- 17 Q Can you describe the TRIOS product release
- 18 timeline that resulted from 3Shape's R&D efforts?
- 19 A Yeah. So we have launched the TRIOS color in
- 20 2013. We launched the TRIOS 3 in 2015. We launched the
- 21 first TRIOS wireless control scanner in the world in 2015.
- 22 Sorry, in 2017. We also launched a new cart called the
- 23 Move in 2018. And we also innovated what we call the part
- 24 where you can work with a laptop already in 2013.
- 25 Q Do you know whether TRIOS has won any industry

1	awards?	_31
2	A	We have won many awards.
3	Q	Can you describe a couple of the more important
4	awards?	
5	A	Yes, I believe it's called the Cellerant award,
6	was best t	echnology award which we have won five times in a
7	row. We h	ave also won the Red Dot award for extraordinary
8	design and	usability in 2018.
9	Q	Switching gears a little bit, have you ever
10	personally	discussed patents with anyone from Cadent or
11	Align?	
12	A	Yes.
13	Q	And who was that with?
14	A	Avi Kopelman.
15	Q	And when and where did that conversation occur?
16	A	This was in Canada, October 2015.
17	Q	Can you briefly describe the conversation?
18	A	Yeah. So we had been presenting, both of us,
19	and then we	e were discussing in a group afterwards, and Avi
20	was saying	that we were violating TRIOS was violating
21	the iTero p	patents.
22	Q	And are you aware that an interface between
23	TRIOS and 1	Invisalign opened in 2016?
24	A	Yes.

25

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Pursuant to that integration, could Align track

- which scanned files came from a TRIOS scanner?
- 2 A Yes, they could both see it came from the 3Shape
- 3 cloud and there's a tag in the actual STL file.
- 4 (Reporter interruption.)
- 5 A There's a tag, a small tag saying 3Shape in the
- 6 STL file, which is the scan file. And there was also the
- 7 cloud. So you could see when it comes into the cloud, from
- 8 the 3Shape cloud into the Align cloud.
- 9 Q Did you follow whether or not the
- 10 TRIOS/Invisalign interface was successful?
- 11 A Yes.
- 12 O And how did you do that?
- 13 A We got the regular update in management.
- 14 Q And what was your perception of the
- 15 TRIOS/Invisalign integration?
- 16 A It was very successful.
- 17 Q And during that integration, did you personally
- 18 ever think Align would sue 3Shape for patent infringement?
- 19 A No.
- Q Are you aware that after filing this case, Align
- 21 announced termination of the TRIOS/Invisalign interface?
- 22 A Yes.
- 23 Q Prior to that announcement, did 3Shape
- 24 management ever discuss the possibility of Align closing
- 25 the interface?

- 1 A Yes.
- Q Why would you discuss that?
- 3 A Because I believe it's very good management that
- 4 you consider for different scenarios both positive and
- 5 negative.
- 6 Q Prior to the termination announcement of the
- 7 TRIOS/Invisalign interface, did you personally think that
- 8 Align would close that interface?
- 9 A No.
- 10 Q Can you please turn in your witness binder to
- 11 JX-204C. And do you see on page 1 there's an e-mail from
- 12 Alan Hyldal that starts in the middle of the page?
- 13 A Yes.
- 14 Q Can you please describe the context of that
- 15 e-mail?
- 16 A Yes. This was one of the status updates we got,
- 17 and we were so successful with this that we were predicting
- 18 that 15 percent of all Align cases would come from TRIOS by
- 19 end of 2017.
- 20 Q And you respond at the top of the first page by
- 21 e-mail, and you say, really impressive, and it makes close
- 22 to impossible for Align to close us down.
- What did you mean by that?
- 24 A With such a large number of customers, I could
- 25 not imagine that Align would treat their own customers so

- 1 bad and shut down that interface.
- MR. SHAW: Pass the witness, Your Honor.
- JUDGE CHENEY: Okay. Any cross-examination of
- 4 Mr. Fisker?
- 5 MR. JACOBS: Yes, Your Honor.
- JUDGE CHENEY: Please proceed.
- 7 MR. JACOBS: Thank you very much, Your Honor.
- 8 CROSS-EXAMINATION
- 9 BY MR. JACOBS:
- 10 Q Good morning, Dr. Fisker. It's good to see you
- 11 again.
- 12 A Good morning.
- 13 Q I want to start out with something you said at
- 14 the beginning of your testimony. You said that 2009 was
- 15 somewhat of an inflexion point at 3Shape when Dr. Van der
- 16 Poel was hired; is that correct?
- 17 A Yes.
- 18 Q So if Dr. Van der Poel tells us something about
- 19 the operation or the functionality of the TRIOS, we should
- 20 take his word at that, correct?
- 21 A Yes.
- Q Okay. Now, 3Shape was aware of Cadent patents
- 23 in 2007.
- 24 That's true, isn't it, sir?
- 25 A Yes.

- 1 Q And you can agree that that was fairly early in
- 2 the development process of the TRIOS, right?
- 3 A Yes.
- 4 Q And there were internal discussions at 3Shape
- 5 where significant concerns were raised about Cadent
- 6 patents.
- 7 Fair enough?
- 8 A Yes, we did a lot of freedom-to-operate
- 9 analysis.
- 10 Q True.
- No lawyers were involved in that, right?
- 12 Correct, sir?
- 13 A Patent agents, internal patent agents.
- 14 Q Thank you, sir.
- So 3Shape engineers, including yourself, did a
- 16 search, and you identified what would be described as key
- 17 Cadent patents.
- That's true, isn't it?
- 19 A Yes.
- 20 Q And 3Shape engineers discussed these key Cadent
- 21 patents internally, true?
- 22 A Yes.
- 23 Q So it's fair to say that 3Shape as a company
- 24 wants to avoid infringing patents, correct?
- 25 A We don't want to -- yes. We don't want to

- 1 infringe patents.
- 2 O But you understand at the same time that a
- 3 company can still infringe a patent even if it wants to
- 4 avoid infringing a patent?
- 5 You understand that, right?
- 6 A Yes.
- 7 Q So if you could, Dr. Fisker, I'm going to ask
- 8 you to turn to JX-0235C. You should have a binder from us
- 9 as well, and I'm going to pull this up.
- 10 JUDGE CHENEY: I don't think binders have been
- 11 distributed for your cross.
- 12 And I just don't know how we would cross-examine
- 13 without a binder.
- MR. JACOBS: I agree, Your Honor.
- 15 THE WITNESS: Would you repeat the number?
- MR. JACOBS: Yes. Thank you, Dr. Fisker. It's
- 17 JX-0235C.
- 18 MR. SHAW: Your Honor, this is a confidential
- 19 3Shape business document.
- 20 MR. JACOBS: Your Honor, this is a -- actually,
- 21 it's a study of competitive scanners in the marketplace.
- 22 There's absolutely nothing in it that would be
- 23 confidential. I believe they even discussed this during
- 24 the direct examination of Dr. Fisker.
- JUDGE CHENEY: Any response, Mr. Shaw?

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1
                MR. SHAW: We didn't discuss this document, Your
     Honor, and the document is, like I said, a confidential
 2
     internal business document.
                JUDGE CHENEY: Who prepared the document?
 5
                MR. JACOBS: Document was prepared by engineers
 6
     within 3Shape doing competitive analysis of scanners on the
 7
     marketplace, Your Honor.
 8
                JUDGE CHENEY: We'll go on the confidential
 9
     record.
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                MR. SHAW: Thank you, Your Honor.
11
                (Confidential session follows.)
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1	OPEN SESSION CONTINUED
2	JUDGE CHENEY: Any redirect for the witness?
3	(Reporter interruption.)
4	JUDGE CHENEY: Can we go on the public record or
5	is it going to be more about internal deliberations about
6	patent strategy and competitive development?
7	MR. SHAW: Yes, Your Honor, I'm going to dive
8	right into that.
9	And, actually, Your Honor, I have a redirect
10	binder if our paralegal may approach one more time.
11	JUDGE CHENEY: We'll stay on the confidential
12	record. But surely
13	MR. JACOBS: Were these disclosed to us pursuant
14	to the agreement to disclose documents relating to
15	the direct I don't believe they were, Your Honor.
16	MR. SHAW: Your Honor, I wasn't planning to go
17	into these documents, but I believe the cross-examination
18	opened the door.
19	MR. JACOBS: Your Honor, we had an agreement in
20	place that anything used on direct in any way would be
21	provided ahead of time so you could properly prepare. This
22	is completely inappropriate, violates our agreement.
23	JUDGE CHENEY: Okay. Well, was I a part of the
24	agreement?
25	MR. SHAW: No. vou weren't. Your Honor.

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MR. JACOBS: We made the agreement -- we brought.
 1
     it to your attention, it was two days before at 7:00, any
     documents or exhibits that you're going to use with a
     witness on direct, you have to disclose, and I believe we
     made Your Honor aware of it in some type of document, and
 5
     certainly I mentioned it during the prehearing conference.
 6
     We've relied upon this agreement. There are 15 documents
     that have never been provided before this direct, Your
 8
 9
     Honor.
                JUDGE CHENEY: So in your agreement, Mr. Jacobs,
10
     did you agree to provide documents that would be used on
11
     cross-examination?
12
                MR. JACOBS: No, just direct demonstratives and
13
     exhibits that would be used in any way as part of a direct,
14
15
     Your Honor.
                JUDGE CHENEY: So you could surprise the witness
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     with -- and the witness's counsel with things on
17
     cross-examination, but it's your position that the
18
     witness's counsel should not be able to rehabilitate those
19
20
     things that they did not have knowledge of beforehand?
                MR. JACOBS: In my 30 years of trying cases,
21
22
     including at the Department of Justice, it's always been
     that way, Your Honor. You can cross-exam with anything so
23
     you don't have to look at it. For example, I haven't had
24
     an opportunity to look at these documents to determine
25
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- 1 whether I have objections to them. That is the basis of
- 2 the agreement with regard to exchanging documents for
- 3 direct examination. No surprises. Am I going to object to
- 4 what he's going to show the witness? Cross-exam, Your
- 5 Honor, because you can really go anywhere with a
- 6 cross-exam, we never agree to provide cross-exam documents
- 7 before a cross-examination in any case I've ever been
- 8 involved with.
- JUDGE CHENEY: How does this relate to your
- 10 agreement that there's nothing that's beyond the scope? So
- 11 if -- how does that relate?
- MR. JACOBS: I can explain that. You can go
- 13 beyond the scope, Your Honor, as long as -- if you're on
- 14 direct examination in any way you're providing that at 7
- 15 p.m. two nights before so that the parties can meet and
- 16 confer if there are any concerns whatsoever in the
- 17 documents that one intends to use. So as long as they
- 18 would have provided these document pursuant to our
- 19 agreement and we could have examined them and had a meet
- 20 and confer, raising objections with Your Honor, that would
- 21 be okay. What you can't do is you can't bring 15 new
- 22 documents in for a redirect when you haven't provided them
- 23 and you have an agreement that says anything that will be
- 24 used in any capacity on direct will be exchanged two nights
- 25 before 7 p.m., Your Honor.

1 . JUDGE CHENEY: Your response, Mr. Shaw? 2 MR. SHAW: Your Honor, this is not direct, this is redirect. He opened the door by trying to intimate with 3 4 the witness that there was some copying of Cadent's 5 patents, and under Federal Rule of Evidence 106 is a 6 similar completeness rule to what we've discussed before. I'm entitled to introduce any other writing or recorded statement that in fairness ought to be considered at the 8 9 time if he introduces part of a writing or recorded statement. 10 11 And, Your Honor, we think this completes the picture as to 3Shape's analysis of the Cadent patents. He's trying to present only part of the story to intimate 13 some kind of copying. 14 15 JUDGE CHENEY: Well, I don't understand if 16 you're introducing an additional part of the written record 17 that was presented to the witness during direct why we have 15 additional exhibit numbers. 18 19 MR. SHAW: Because that's further communications 20 in the same analysis that he was -- that he went part of the way down the road towards. 21 22 JUDGE CHENEY: So they're in the same e-mail chains, part of the same document? 23 24 MR. SHAW: I do not believe they are in the

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exact same e-mail chain, Your Honor, but it's among the

- 1 same people doing the same analysis of the same patents.
- JUDGE CHENEY: Okay. We're going to take a
- 3 two-minute recess.
- 4 (Brief recess.)
- JUDGE CHENEY: Please take your seats. Let's go
- 6 back on the record. I want to hear from Mr. Shaw. First
- 7 of all, I want to see the binder, that's got the 15
- 8 exhibits.
- 9 Mr. Shaw, was there a date by which exhibits to
- 10 be used at the hearing were disclosed to the other side,
- 11 the procedural schedule?
- MR. SHAW: Yes, Your Honor.
- JUDGE CHENEY: Was that date May 11th?
- MR. SHAW: I believe that's correct, Your Honor.
- 15 JUDGE CHENEY: Were these 15 exhibits on that
- 16 list?
- MR. SHAW: They were not, Your Honor. They were
- 18 produced afterwards pursuant to Judge Lord's compelling
- 19 order in the 1090 investigation.
- JUDGE CHENEY: And not produced pursuant to any
- 21 order that I gave allowing discovery after the close of
- 22 discovery.
- MR. SHAW: That's correct, Your Honor, but we do
- 24 have a cross-use agreement, if I may.
- JUDGE CHENEY: Yeah. They're not going to come

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- 1 in.
- MR. SHAW: Does that include the ones that
- 3 counsel showed on cross, Your Honor, that were from that
- 4 same production on Monday?
- JUDGE CHENEY: Did they produce them on the list
- 6 that was disclosed on May 11th?
- 7 MR. SHAW: They did not, Your Honor.
- JUDGE CHENEY: Let me consult one more time.
- 9 Brief recess.
- 10 (Brief recess.)
- JUDGE CHENEY: Please take your seats. We .can
- 12 go back on the public record.
- My, what a pickle we find ourselves in. I'm
- .14 really disappointed, I'll just say that.
- So no documents from the examination of this
- 16 witness have been admitted into the record. We will go
- 17 through that tomorrow. I'm not going to admit anything
- 18 that didn't follow my order about when exhibits would be
- 19 disclosed.
- 20 So with that, you can continue your examination,
- 21 Mr. Shaw.
- MR. SHAW: Thank you, Your Honor.
- 23 BY MR. SHAW:
- Q Dr. Fisker, can you turn back to JX-235C in
- 25 Mr. Jacob's binder, the cross binder?

1 (Reporter interruption.) 2 JUDGE CHENEY: I would like my opening to be on public record. And are we going to continue that, Counsel? 3 4 MR. SHAW: We need to be on the confidential 5 record, Your Honor. 6 (A discussion was held off the record.) 7 JUDGE CHENEY: Just it case it helps counsel, I have orders in the case about when you're supposed to do things. Your side agreements don't change my orders. That was one of the points of one of the motions in limine or an 10 order that came out shortly before that. If you want 11 12 relief from what you're required to do under my orders, you have to ask for it. And you have to get a ruling from me on it. Your cross-use agreements are whatever you think 14 they are, but they don't contravene my orders. 15 16 Okay. Let's continue now. Mr. Shaw would like 17 to be on the 3Shape confidential record. 18 MR. SHAW: Yes, sir. 19 JUDGE CHENEY: And we'll proceed on that basis. 20 (Confidential session follows.) 21 22 23 24 25

1		OPEN SESSION CONTINUED
2		JUDGE CHENEY: So we're on the public record,
3	and the n	ext witness called is Christopher Melchior for
4	Responder	its.
5		Mr. Melchior, please raise your right hand and I
б	will swea	r you in.
7		(Oath administered.)
8		JUDGE CHENEY: Please be seated. I believe
9	Mr. Shaw has come questions for you.	
10		CHRISTOFFER MELCHIOR,
11	having been first duly sworn, was examined and testified as	
12	follows:	
13		DIRECT EXAMINATION
14	BY MR. SHAW:	
15	Q	Can you please state your full name?
16	A	Christoffer Melchior.
17	Q	Who is your current employer?
18	A	3Shape A/S.
19	Q	What is your title at 3Shape A/S?
20	A	I am a VP of global sales and customer care.
21	Q	How long have you worked for 3Shape A/S?
22	A	Since August 2016.
23	Q	Are you familiar with the process by which
24	3Shape se	lls its products?
25	A	Yes.

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- 1 Q Can you please generally describe 3Shape's sales
- process in the United States?
- 3 A Yes. So at 3Shape, we have a number of
- 4 resellers in the U.S. So 3Shape sells our products to
- 5 resellers, and these resellers sells the products to end
- 6 users. They can be dental laboratories or dental clinics.
- 7 Q Who does 3Shape consider to be its customers
- 8 generally?
- 9 A The resellers.
- 10 Q What are your current job responsibilities as VP
- of global sales?
- 12 A My current job responsibility involves
- 13 establishing the priorities for the country organizations
- 14 and also defining the responsibilities of the country
- 15 organizations vis-à-vis the headquarters.
- 16 Q What are your current responsibilities as VP of
- 17 customer care?
- 18 A So 3Shape does after-sales support on our
- 19 products. So if the reseller cannot solve a technical
- 20 issue for an end user, the reseller will hand over that
- 21 case to 3Shape who will then try and troubleshoot the case.
- Q Are you responsible for any other departments at
- 23 3Shape?
- 24 A I'm also responsible for -- I apologize for
- 25 that. I'm responsible for the global academy. So we just

- 1 separate out the global academy from customer care.
- 2 Q What is the global academy?
- 3 A The global academy is our training organization
- 4 where we train predominantly resellers in the use of our
- 5 products, and also train our own internal staff, and to a
- 6 lesser degree also train some end users.
- 7 Q You mentioned country organizations before. Are
- 8 you familiar with which 3Shape entity is the country
- 9 organization for the United States?
- 10 A Yes.
- 11 Q Which one is that?
- 12 A So 3Shape, Inc.
- 13 Q Are you familiar with the role and
- 14 responsibilities of 3Shape, Inc.?
- 15 A Yes.
- 16 Q And how are you familiar with that?
- 17 A So 3Shape, Inc., reports to me. So together
- 18 with the general manager of 3Shape, Inc., I have designed
- 19 the organization and agreed on what the roles and
- 20 responsibilities is of the different parts of the
- 21 organization. I was also earlier this year for a two-month
- 22 period interim general manager for North America or for the
- 23 U.S., because the general manager that we had previously
- 24 got another job opportunity.
- 25 Q Can you describe how the departments of 3Shape,

- 1 Inc., are organized?
- 2 A Yes. So we have a commercial organization with
- 3 three business managers that are regionally based. Then we
- 4 have a marketing department that's based in New Jersey. We
- 5 have a business development organization that's also
- 6 predominantly based in New Jersey. Then we have an academy
- 7 team and we also have a number of account managers who
- 8 manages the relationships with our resellers.
- 9 Q What does the commercial organization of 3Shape,
- 10 Inc., do?
- 11 A So we have three regional managers that each has
- 12 about ten people each who are responsible for supporting
- 13 the resellers at the local level. So presenting 3Shape
- 14 products to the resellers, training them on how 3Shape
- 15 products works with the resellers. And also on occasions,
- 16 they will be together with the resellers supporting them
- when they make visits to dentists or dental laboratories.
- 18 Q What does the marketing organization of 3Shape,
- 19 Inc., do?
- 20 A Two things. So mainly they will be supporting
- 21 the resellers with marketing materials and marketing
- 22 campaigns that the resellers can use to promote the
- 23 product. And also to some degree, we do certain events
- 24 like industry congresses where 3Shape will be present at
- 25 these events.

- 1 Q What does the business development organization
- of 3Shape, Inc., do?
- 3 A So the business development team is -- I believe
- 4 it's broken into three smaller functions. One is we have a
- 5 business development manager who looks at the implant
- 6 segment of the market and also the resellers we have in
- 7 that segment. Then we have a lab, dental laboratory
- 8 business where the business manager looks after the
- 9 resellers within the dental laboratory area. And also
- 10 we'll attend the different events. And we have a special
- 11 markets team that looks after large corporate accounts. So
- 12 that could be universities, it could be dental service
- 13 organizations and so on.
- 14 Q And can you provide a few examples of the larger
- 15 dental service organizations in the U.S.?
- 16 A Yeah. So there's Heartland Dental, I believe
- 17 they're called, and Aspen Dental, Pacific Dental, Western
- 18 Dental. So there's a large number of different corporate
- 19 accounts.
- 20 Q What does the account management department at
- 21 3Shape, Inc., do?
- 22 A So the account management does -- to the best of
- 23 my recollection, we have two. One looks after our largest
- 24 customer of the U.S., that's Henry Schein. And the other
- one looks after the second largest customer in the U.S. and

- 1 that's Patterson Dental.
- Q What does the academy team of 3Shape, Inc., do?
- 3 A We mainly training of the resellers, so making
- 4 sure the reseller staff is well trained. They will also at
- 5 the request of a reseller train end users so if someone
- 6 bought a TRIOS scanner and the reseller does not have
- 7 resources to train that user, they will request 3Shape to
- 8 do that training.
- 9 Q Does 3Shape, Inc., sell any 3Shape products?
- 10 A No.
- 11 Q Which 3Shape entity sells TRIOS scanners to
- 3Shape's U.S. resellers?
- 13 A 3Shape TRIOS.
- Q Does any 3Shape entity hold any TRIOS scanners
- 15 in the U.S. that are for sale?
- 16 A No.
- 17 Q Does any 3Shape entity hold any TRIOS scanners
- in the U.S. that are not for sale?
- 19 A Yes.
- 20 Q What are those TRIOS scanners for?
- 21 A A number of things. Mainly they are -- each of
- 22 our territory managers and academy staff has a number of
- 23 demo -- TRIOS demo units so they can use that to present to
- 24 our resellers' representatives in the field. Also the
- 25 training department has a number of scanners. We have what

- 1 we call a cart system so we can send out -- if we're doing
- 2 a training and education session, if we're doing a congress
- 3 or other events, we can send out scanners that can be
- 4 available at these types of events.
- And also we have what we call an express
- 6 replacement program. So if a dentist has a TRIOS scanner,
- 7 and that TRIOS scanner is under warranty, we will replace
- 8 that within 48 hours if it doesn't work. So we will do
- 9 what we call an express replacement.
- 10 Q Are any of the TRIOS scanners that 3Shape holds
- 11 in the U.S. new products?
- 12 A There could be some new products. So if a
- 13 dentist has received a scanner, we call dead on arrival, so
- 14 it doesn't work upon them picking it out of the box, we
- 15 will in our express replacement program ship the scanner to
- 16 the dentist so they get a completely new scanner.
- 17 Q Does 3Shape hold any refurbished scanners in the
- 18 United States?
- 19 A Yes.
- 20 Q What are those used for?
- 21 A Those are used -- if you are covered by the
- 22 warranty today and your scanner is more than three months
- 23 old, you will typically get an equivalent unit. So let's
- 24 say you've had a scanner for a year and it breaks down,
- 25 we'll replace it with a scanner that is one-year old, or

- 1 attempt to get it in a scanner that's equivalent to what
- 2 the dentist would have beforehand.
- 3 O Since you started in August of 2016, has 3Shape
- 4 ever offered any of the TRIOS scanners that it holds in the
- 5 U.S. for sale?
- 6 A To the best of my knowledge, no.
- 7 Q Is there any situation in which 3Shape would
- 8 sell the TRIOS scanners that it holds in the U.S.?
- 9 A I don't believe so, no.
- 10 Q Does 3Shape's order system allow 3Shape, Inc.,
- 11 to invoice TRIOS scanners?
- 12 A I don't believe so.
- 13 Q Are you aware that at one point there was an
- 14 interface so TRIOS scans could be sent to Invisalign?
- 15 A Yes.
- 16 Q And do you recall when Align announced that they
- 17 would close that interface?
- 18 A Yes.
- 19 Q When was that?
- 20 A December 2017.
- 21 Q And, generally, did the closure of that
- 22 interface affect 3Shape?
- 23 A Yes.
- MR. SHAW: Your Honor, we're going to need to go
- 25 on the 3Shape confidential record for a little sales

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information.
                JUDGE CHENEY: Okay. We're on the 3Shape
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 3
     confidential record. If you're not authorized to view
     3Shape information, please leave the hearing room.
 5
                (Confidential session follows.)
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1	OPEN SESSION CONTINUED
2	MR. SHAW: I pass the witness, Your Honor.
3	JUDGE CHENEY: Any cross-examination?
4	MS. ONDRICK: Yes, Your Honor.
5	CROSS-EXAMINATION
6	BY MS. ONDRICK:
7	Q Good afternoon, Mr. Melchior.
8	A Good afternoon.
9	Q The TRIOS scanner has compatibility with other
10	clear aligners, correct?
11.	JUDGE CHENEY: I'm sorry to interrupt. Can we
12	be on the public record or no?
13	MS. ONDRICK: Yes, we can be on the public
14	record for this part.
15	JUDGE CHENEY: We're on the public record, and
16	we'll start that with the cross-examination.
17	BY MS. ONDRICK:
18	Q In fact, 3Shape considers its product an open
19	system, correct?
20	A Yes.
21	Q And 3Shape has interoperability with almost all
22	of the clear aligner companies, right?
23	A I don't know if we have with all.
24	Q Okay. I guess we'll check on that. And you had
25	that type of clear aligner compatibility before Invisalign

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- interoperability; isn!t that right?
- 2 A I don't know how many of those were operational
- 3 before the Invisalign interoperability.
- 4 Q Do you think you had Invisalign -- excuse me,
- 5 clear aligner compatibility with most of the clear aligner
- 6 companies out there in the market?
- 7 A Honestly, I don't know. I mean, there's a lot
- 8 of companies out there, and I'm not sure how many of them
- 9 we have interoperability with.
- 10 Q So you don't know how many you have
- 11 .interoperability with?
- 12 A I don't know the specific number, no.
- 13 Q You don't know if it's most?
- 14 A No.
- 15 Q How about many? Do you know if it's many?
- 16 A I would say we have -- in most of the bigger
- 17 markets we have with some of the more established products.
- 18 But I know, you know, let's say in Korea, there are 40
- 19 different aligners, to the best of my knowledge, and I'm
- 20 not sure we have with any of them.
- MS. ONDRICK: Can we go ahead and pull up
- 22 Mr. Melchior's deposition transcript at 260. Starting at
- 23 line 14. Excuse me, we'll take line 19.
- 24 A Sorry, I didn't hear that.
- Q Not for you, sir. I can put up it up on the

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And 3Shape actually benefitted from Invisalign interoperability, correct? A Yes. 3 And 3Shape made more money because of Invisalign interoperability, correct? 5 Yes. 6 A 3Shape recognized more revenue because of 7 8 interoperability, correct? A Yes. 9 3Shape wanted Invisalign interoperability, 0 10 11 correct? I was not part of that discussion, so -- but 12 certainly there was a benefit to 3Shape to have the 13 interoperability. 14 Because it would make more money, right? 15 16 A We were making more sales, yes. And 3Shape continues to have Invisalign 17 interoperability outside the U.S., right? 18 That's correct. 19 A Q And 3Shape continues to submit scans originating 20 from outside the U.S., right? 21 A Correct. 22 And 3Shape hasn't closed down the connection for 23

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No, because we know customers would like to have

24 Invisalign interoperability, has it?

A

25

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- 1 the interoperability.
- 2 Q And 3Shape continues to receive that benefit
- 3 from Invisalign capability, at least outside the U.S.,
- 4 right?
- 5 A Yes.
- 6 Q So customers are buying the TRIOS because of
- 7 that interoperability, right?
- 8 A I don't think customers are buying it only
- 9 because of the interoperability, but it is a feature and a
- 10 benefit of the 3Shape product.
- 11 Q Well how about those lost sales you pointed to?
- 12 People are returning products. They were returning it
- 13 because there was no longer Invisalign interoperability,
- 14 right?
- 15 A There were some customers who chose to return
- 16 the scanner, but not all.
- 17 Q For the customers who returned the scanner, they
- 18 returned it because the scanner lacked Invisalign
- 19 interoperability, correct?
- 20 A I think it's an assumption and it's a fair
- 21 assumption, but, of course, we would need to ask those
- 22 customers why they returned. But that was the reason given
- 23 to us by Henry Schein. We did not talk to those customers
- 24 directly.
- 25 O So you don't know why they returned them?

1 . A We were told by Henry Schein that they were 2 returning it because of the loss of interoperability. Excuse me, you said what? It kind of slurred together. JUDGE CHENEY: I will repeat the transcript. 5 We were told by Henry Schein that they were 6 returning it because of the loss of interoperability. Was that Invisalign interoperability? 8 Yes, because the loss of Invisalign 9 interoperability. 10 So Invisalign interoperability drove the sales 0 11 of those TRIOS scanners, right? 12 It was definitely part of -- one of the reasons 13 why our TRIOS scanner was selling well in North America, 14 correct. 15 O Please answer the question, sir. 16 MS. ONDRICK: Move to strike as nonresponsive. 17 THE WITNESS: Could you repeat the question, 18 please? 19 JUDGE CHENEY: I'll repeat it. 20 So Invisalign interoperability drove the sales 21 of those TRIOS scanners, right? It contributed, definitely, yes. 23 It drove those sales, right? 24 Q

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Again, I think you would need to ask the

25

A

- 1 dentists why they bought the scanner.
- 2 Q So you don't know why, then? You can't have it
- 3 both ways, sir. Either the Invisalign interoperability
- 4 drove the sale or you don't know why. It's one or the
- 5 other.
- 6 A I'm sorry, I have to stand by my answer. If you
- 7 need to know why a dentist bought the TRIOS scanner, you
- 8 would need to ask the dentist.
- 9 Q So then I guess you wouldn't agree with me that
- 10 3Shape never would have made those sales if doctors
- 11 required Invisalign?
- 12 A Again, I think Invisalign interoperability is a
- 13 feature -- an attractive feature of the TRIOS scanner, but
- 14 at the end of the day the doctor buys it because of
- 15 multiple things.
- 16 O So if a TRIOS scanner is returned because
- 17 there's no longer Invisalign interoperability, that's not
- 18 the reason for the return? Is that your testimony?
- 19 A I think, as I said earlier, they were returned
- 20 to Henry Schein, and Henry Schein said that the loss of
- 21 interoperability was the reason why it was returned.
- 22 Q So you don't know, though, why they were
- 23 returned then; you just accepted what Henry Schein said at
- 24 face value, or did you believe what Henry Schein said?
- 25 A Of course we believed what Henry Schein said.

1 So then they were returned because of a lack of Invisalign interoperability, correct? 3 Again, if that's the assumption, we can say that, yes. Okay. So we'll go with that as an assumption. 5 Q 6 So if we assume that a scanner was returned for a lack of Invisalign interoperability, we can also assume that Invisalign interoperability drove the sale, right? Again, we believe it was a key feature and 9 benefit of the TRIOS scanner. But, again, you would need 10 to ask the specific dentist why they buy the scanner, and I 11 think there are many reasons why they buy it. But for sure Invisalign interoperability was a 13 key part of buying the scanner. 14 MS. ONDRICK: Move to strike as nonresponsive. 15 JUDGE CHENEY: I'll strike the answer as 16 17 nonresponsive. I'll repeat the question for you, sir. So we'll go with that as an assumption. So if 18 we assume that a scanner was returned for lack of 20 Invisalign interoperability, we can also assume that Invisalign interoperability drove the sale, right? 21 THE WITNESS: And I -- yes, it had a key benefit 22 and a key feature of the TRIOS scanner. 23

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explanation, you can explore that with your counsel.

24

25

JUDGE CHENEY: Okay. If you have a further

1... So if a customer originally purchased a TRIOS 2 scanner because of Invisalign interoperability and then 3 cancelled it, we can assume that the only reason the customer bought the scanner was because of Invisalign 5 interoperability. We have that established now, right, sir? 6 To the best of my knowledge, there are multiple 7 scanners in the market with Invisalign interoperability, 8 9 and they still chose to buy the TRIOS scanner. So they could have bought another scanner if it was only for 10 Invisalign interoperability. 11 MS. ONDRICK: Move to strike as nonresponsive. 12 JUDGE CHENEY: So here's -- the difficult 13 exercise that we're doing here, and it's a little bit 14 15 artificial, it's something we don't do in everyday conversation, so the way cross-examination generally works 16 is, if counsel asks you a yes-or-no question, you should 17 18 respond with one of three ways: Yes, no, or I don't know. 19 For example, if the question were loaded with a bunch of assumptions that you don't agree with, then you 20 could say, I don't know the answer to that. 21 22 But I think what counsel is trying to get you to 23 do is just clarify if you agree with certain of her propositions or not. And if you don't, you just say no, 24

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and you can explore it with your counsel. And if you do,

you can just say yes, and she'll move on. 2 Do you have any questions about that? 3 THE WITNESS: No. Thank you. JUDGE CHENEY: Okay. 5 Let me repeat the last pending question. 6 So if a customer purchased a TRIOS scanner because of Invisalign interoperability and then cancelled it, we can assume that the only reason the customer bought the scanner was because of Invisalign interoperability. We have established that now, right, sir? 10 11 . THE WITNESS: No, I.don't agree. 12 JUDGE CHENEY: Okay. 0 Let's go back to this, then. 14 You have compensated your company, 3Shape hascompensated Henry Schein for purported returned scanners; 15 is that correct? 16 17 MR. SHAW: Your Honor, I think we need to be on the confidential record for this. 18 19 I'm sorry to interrupt. 20 JUDGE CHENEY: I don't think -- actually, I 21 don't know the answer, so let's go on the confidential record. 22 (Confidential session follows.) 23 24 25

1	OPEN.SESSION CONTINUED
2	JUDGE CHENEY: Sorry, for the transcript, we're
3	on the public record.
4	BY MS. ONDRICK:
5	Q And I think your title at 3Shape is vice
6	president of global sales and customer care, correct?
7	A That's correct.
8	Q And your job is to sell the portfolio of 3Shape
9	products, correct?
10	A It's one of my responsibilities, yes.
11	Q And the head of the North America region for
12	3Shape reports to you, correct?
13	A That's correct.
14	Q And together with the head of the North America
15	at 3Shape, you worked to build the local commercial
16	organization, right?
17	A That's correct.
18	Q And you told us about that in your testimony.
19	One of those organizations was a sales organization, right?
20	A We call it a commercial organization.
21	Q And there was a sales organization within that.
22	A Again, we call it a commercial organization.
23	Q And you have 20 to 30 people in the sales
24	organization, correct?
25	A We have them in the commercial organization,

```
1 yes.
                So if we could go to your deposition testimony,
    page 24, starting at line 9.
               Question: And how could you describe what you
    mean by build up the local community organization at least
    as that pertains to the United States?
 7
               Answer: --
              Sorry, I didn't -- could you repeat the
 8
    question, please?
 9
         Q
               Sure.
10
             So I think we're on the wrong page. So if we
11
    could start at page 24, and we're going to have to start
12
     actually at line 4 because there's a clarification in
13
    there.
14
               Is that fair, sir? Do you see that, at line 4?
15
               Yeah.
        A
16
17
         O Okay.
18
              And how -- can you describe what you mean by
    build up the local community organization at least as that
19
20
     pertains to the United States?
               Answer: What do you mean by "the local
21
22
     community organization"?
               Question: Let me see. Oh, excuse me,
23
     commercial organization.
24
               Answer: So the commercial organization in North
25
```

```
America has a marketing organization.
 1
 2
               Question: Mm-hmm.
              Answer: It was what we call business
 3
     development organization. It has account management, so
    managing our resellers, and also has a sales organization,
 5
     and we have three regional business managers.
 7
               That was your answer at your deposition,
   correct?
 9
         A Yes.
              At your deposition you had a sales organization,
         Q
11 correct, sir?
               Yes.
        A
12
     Q And then, sir, continuing down.
13
               Do you know --
14
               Excuse me, let's go to page 43. Take a look at
15
    line 21.
16
               Do you know approximately how large the sales
17
18 organization is in the U.S.?
              Answer: Between 20 and 30 people.
19
               Question: And are they all located in the U.S.?
20
               Answer: I believe, yes.
21
22
               That was the question and answer at the
     deposition, correct?
23
24
         A
               Yes.
        Q And those personnel, they're with 3Shape, Inc.,
25
```

correct? That's correct. A Now, 3Shape does a fair amount of trade shows in 3 the U.S., right? 5 A Yes. And the U.S. trade shows are an important part Q of the responsibilities of the 3Shape sales organization in the United States, right? 9 A Yes. And 3Shape displays products at these shows in 10 the U.S., correct? 11 That's correct. And 3Shape displays at least one, probably more 13 than one, TRIOS scanner at these U.S. trade shows, correct? 14 A 15 O And 3Shape also displays certain software 16 17 products at the U.S. trade shows, correct? A Yes. 18 And you will display the most relevant products 19 for end users attending the trade show, and that could software, fair? 21 A Yes. 22 And when 3Shape puts up its products for display 23

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24 at U.S. trade shows, they are displaying for end users, not

25 resellers, right?

- 1 A Yes.
- 2 Q So you know companies go to these -- companies
- 3 like 3Shape go to these trade shows to show products to
- 4 doctors, right?
- 5 A Yes.
- 6 Q And one of the things that companies do at these
- 7 dental and orthodontic trade shows is try to sell products,
- 8 right?
- 9 A I mean, for 3Shape we're trying to promote our
- 10 product. We're not selling the product.
- 11 MS. ONDRICK: Move to strike, nonresponsive..
- JUDGE CHENEY: I will grant it.
- 13 The question is, So you know companies go to
- 14 these -- companies like 3Shape go to these trade shows to
- 15 show products to doctors, right?
- 16 THE WITNESS: Of course, I know companies go
- 17 to -- other companies will go to these trade shows. But
- 18 for 3Shape, because we're not selling in the U.S., we're
- 19 going there to promote our product and create brand
- 20 awareness of our product.
- 21 JUDGE CHENEY: Okay. I'm going to try again.
- 22 And if your answer is yes or no, just say that. And if
- 23 you're unable to do that, just let me know and then your
- 24 counsel can explore it with you.
- 25 Here's the question again: So companies go to

```
these -- .companies like 3Shape go to these trade shows to
     show products to doctors, right?
               THE WITNESS: I don't know.
 3
              Do you go to trade shows, sir?
         Q
              Sometimes, yes.
 5
         A
               And you have gone to trade shows in the U.S.,
 6
 7
     correct?
         A
               That's correct.
 8
               You've gone to orthodontic trade shows, right,
 9
10
    in the U.S.?
              No. I have not attended an orthodontic show in
11
12
    the U.S.
              Have you gone to a dental show in the U.S.?
13
        0
               I have attended a dental show in the U.S.
14
         A
               Well, we're good then.
         0
15
               And one of the things that companies at these
16
17
    dental trade shows that you've been to do is try to sell
    their products to dentists, right?
18
         A
               Yes.
19
               And they actually do that at the show, right?
20
         Q
               I don't know.
         A
21
                Companies at shows don't take orders? You don't
22
         O
23 know?
               I don't know.
         A
24
```

Okay.

Q

25

Does 3Shape track how many sales it makes at 2 U.S. trade shows through resellers? We try and get feedback from resellers, but we do not always get that, no. So we try and track it, but we don't always get that information. 5 So you do track it. Q 6 We try and get the information from the resellers, but we don't necessarily know how much a reseller sells at a trade show. But you do receive information about how much a 10 reseller sells at a trade show on occasion, correct? 11 Personally, I've never seen that information. 12 A 0 Okay. 13 And 3Shape, when it's at these trade shows in 14 the U.S., it's demonstrating its products, right? 16 A Yes. And it's demonstrating its TRIOS scanner, 17 0 18 correct? A Yes. 19 And it's demonstrating its software, correct? 0 20 A Yes. 21 The success of a trade show is determined based 22 on the sales, isn't it? 23

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would mainly be leads. So customers who expressed an

24

I don't know. Not only sales. For 3Shape they

- interest in our product.
- 2 Q So when 3Shape is at these trade shows in the
- 3 U.S., it's assisting with resellers to make a sale of a
- 4 product, right?
- 5 A We are promoting our products for customers to
- 6 learn about our products.
- 7 Q You're not trying to make a sale of a 3Shape
- 8 TRIOS?
- 9 A No.
- 10 Q Or any 3Shape software?
- 11 A No.
- 12 Q And you're not assisting your resellers in
- making a sale of a 3Shape TRIOS or 3Shape software?
- 14 A May I explain what we do at the show?
- 15 Q Yes or no to assisting, sir.
- 16 Your counsel can ask you that if they want to.
- 17 A Okay.
- I don't know if I would say we're assisting
- 19 sales.
- 20 Q You would say you're not making a sale; is that
- 21 fair?
- 22 A Yes, that's fair.
- 23 Q You don't know if you'd say if you're assisting
- 24 in a sale; is that fair?
- 25 A That's fair.

- 1 . Q Would you say you're supporting a sale?
- Yes or no.
- 3 A I don't know -- I don't know -- I don't know.
- 4 Q You don't know if you're supporting a sale in
- 5 the U.S., okay.
- Are you soliciting a sale in the U.S. at a trade
- 7 show?
- 8 A From my understanding, could you explain what
- 9 you mean by "soliciting"?
- 10 Q You're trying to get somebody to buy your TRIOS,
- 11 trying to get somebody to buy your software.
- 12 A Again, I don't know if that's what we're doing.
- 13 Q If you were at a trade show and a dentist came
- 14 up and wanted to buy a TRIOS, would you turn that sale
- 15 down, or would you -- would you turn it down?
- 16 A If a dentist came up to 3Shape at a trade show
- 17 and they were interested in buying a TRIOS, we would ask
- 18 that dentist to go over to our reseller. We would
- 19 typically walk the dentist over to the reseller and then
- 20 the reseller would have to take that opportunity and do the
- 21 sale.
- 22 Q So then if a dentist asks you at a trade show to
- 23 buy a TRIOS through one of your resellers, you wouldn't
- 24 turn that down, would you?
- 25 A We would ask the dentist -- we would walk with

- 1 the dentist over to the reseller, and then the dentist
- 2 would have the dialogue with the reseller who would then be
- 3 making the sale.
- 4 Q So are you soliciting interest in your products
- 5 when you're at the trade show in the U.S.?
- 6 A Yes.
- 7 Q But is it your testimony that you're just not
- 8 soliciting sales when you're at the trade show in the U.S.?
- 9 A Yes.
- 10 Q Okay.
- Do you recall a meeting that you had with
- 12 Heartland in 2017? We talked about it at your deposition.
- Do you recall that one?
- 14 A Yes.
- 15 Q And you went to that meeting, correct, with
- 16 Heartland?
- 17 A Yes. I had a number of meetings with Heartland,
- 18 yes.
- 19 Q Let's just focus on that one if that's okay.
- 20 Can we do that?
- 21 A Is that the October meeting at Heartland?
- 22 Q That's correct.
- 23 A Yes.
- Q And you came to the U.S. for that meeting,
- 25 right?

```
I was visiting a number of our resellers in the
 2
    U.S.
               Let's just focus on the one, okay?
               Can we do that?
         A
               Yes, but you said I came to the U.S. for that
     meeting. So I was --
              You were in the U.S. for that meeting, correct,
          0
     sir?
         A
               That's correct.
10
         0
               So you visited with Heartland in the United
    States, right?
11
               That's correct.
12
         A
              All right. And you were looking to present your
13
    product to Heartland, right?
14
         A
              That's correct.
15
             And that product included the TRIOS, right?
16
         Q
17
         A
              Yes.
               And you were presenting because you thought they
18
     were interested in having TRIOS as part of their intraoral
19
20
    scanners right?
         A
               Yes.
21
               And you know they were interested in buying
22
     TRIOS -- the 3Shape products, right?
23
         A
               Yes.
24
               And you were there from -- with U.S. 3Shape
25
         0
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```
1 personnel, right?
2
         A
                Yes.
                The U.S. business development organization of
    3Shape supports resellers so they can do their job, right?
5
         Α
               Yes.
               And the job of the resellers, at least to you,
6
    is to make a sale, right?
               Yes.
8
         A
              And the resellers attempt to sell 3Shape
9
10
    products, right?
         A
11
               Yes..
               And the 3Shape sales organization in the U.S.
12
    also supports resellers, right?
     . A
               Yes.
14
               And one thing that people in the U.S. sales
15
    organization of 3Shape do is go to customer, potential
16
    customers sites with the reseller, right?
17
         A
               Yes.
18
                In fact, if a reseller who is attempting to sell
19
    3Shape products wanted a 3Shape employee to accompany the
20
    reseller on a customer visit, they would reach out to a
21
22
    3Shape regional business manager, right?
                Yes.
23
               And you have three of those region business
24
```

25 managers in the U.S., right?

A Yes. 3Shape's customer care after sales support helps 3 resellers too when they call with a product issue, right? A Yes. Q And if the reseller can't solve the problem, 5 they hand it off to 3Shape, right? A Yes. Q And such 3Shape personnel may be responsible for 9 solving that end user's problem, right? A 10 Yes. And it's important for 3Shape to provide after 11 - Q sale customer support to end users, right? 13 A Yes. MS. ONDRICK: I have no further questions. 14 JUDGE CHENEY: Okay. Is there any redirect for 15 16 Mr. Melchior? MR. SHAW: Just two questions, Your Honor. 17 18 JUDGE CHENEY: Can we be on the public record or 19 not? We are back on the public record. 20 21 REDIRECT EXAMINATION 22 BY MR. SHAW: Q You were asked about a sales organization during 23 24 cross. Do you recall that?

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25

A Yes.

```
1
         0
               Is that called anything else?
              We call it a commercial organization.
 2
 3
               And what does the commercial organization of
    3Shape, Inc., do?
 5
                They support our resellers at the local level so
    if a reseller requires training of their staff or if they
    are going to visit a dentist and they would like a 3Shape
    personnel to participate in the visit to be the product
    expert, then we will be there for that.
               MR. SHAW: No further questions, Your Honor.
10
               JUDGE CHENEY: Okay. Any other questions before
11
    I excuse Mr. Melchior?
12
               MS. ONDRICK: No, Your Honor.
13
               JUDGE CHENEY: Thank you, Mr. Melchior, for
14
    coming in. You may be excused.
                THE WITNESS: Thank you.
16
17
                (Witness excused.)
               MR. SHAW: Your Honor, 3Shape is calling
18
    Kristian Hansen. We're going to bring him in from outside.
19
20
                JUDGE CHENEY: Okay.
               Please stand and raise your right hand.
21
                (Oath administered.)
22
               JUDGE CHENEY: Please be seated.
23
                Counsel, proceed when you're ready.
24
                         KRISTIAN HANSEN,
25
```

1 having been first duly sworn, was examined and testified as 2 follows: DIRECT EXAMINATION 3 BY MR. LIU: Q Can you please state your name for the record? Kristian Hansen. 6 A Mr. Hansen, who is your current employer? 0 3Shape TRIOS A/S. Q And what is your current position at 3Shape 9 TRIOS A/S? 10 I'm a project manager for the TRIOS education 11 12 software. Q How long have you been at that position? 13 Seven years. 14 A And did you have any position at 3Shape prior to 15 your current position? 16 Yes. I had three years as a software developer 17 18 and team leader for quality control project called Convince, and two years at software developer and team 19 leader for TRIOS application software. When did you start your position as TRIOS 21 software developer? 23 A 2009. Q And when did 3Shape begin development of the 24

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25 TRIOS software?

- 1 A In 2.009.
- 2 Q And what is TRIOS software?
- 3 A TRIOS software is a Windows application running
- 4 on an external PC responsible for constructing the
- 5 three-dimensional model from the scanner data.
- 6 Q And what do you mean by external PC?
- 7 A It's the -- the PC in TRIOS Cart or TRIOS Move
- 8 or off-the-shelf PC if it's a TRIOS part system.
- 9 MR. LIU: Your Honor, I'm going to be going on
- 10 to the 3Shape confidential record.
- JUDGE CHENEY: What's the nature of the
- 12 information?
- 13 MR. LIU: This is a confidential 3Shape document
- 14 that aim going to..
- JUDGE CHENEY: What is it about?
- 16 MR. LIU: It's about the technical operation of
- 17 the 3Shape software.
- 18 JUDGE CHENEY: Okay. We've had a substantial
- 19 amount of testimony on the public record about this. Is
- 20 this at some level of detail that's particularly unique?
- 21 MR. PATNAIK: Your Honor, this is different than
- 22 what's been talked about before.
- JUDGE CHENEY: Okay. Let's see where we go.
- 24 We'll go on the 3Shape confidential record. If you're not
- 25 authorized to view 3Shape confidential information, please

```
leave the hearing room.
                 (Confidential session follows.)
 2
 3
 5
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
```

1		OPEN SESSION CONTINUED
2		JUDGE CHENEY: We're back on the public record.
3		CROSS-EXAMINATION
4	BY MR. CON	SILVIO:
5	Q	Hello, Dr. Hansen. Nice to see you again.
6	A	Nice to see you.
7	Q	I'm going to try and be brief. I know you've
8	got a flig	ht to catch.
9	А	Thank you.
10	Q	So I know you may have covered a little bit of
11	this, but	I just want to start with some basics.
12		You have familiarity with the TRIOS 3 system;
13	isn't that	correct, Dr. Hansen?
14	А	Yes.
15	Q	And the TRIOS 3 system includes a scanner wand
16	coupled to	a computer, right?
17	A	Correct.
18	Q	And the wand houses an FPGA processor; is that
19	correct?	
20	А	Yes.
21	Q	And the computer coupled to the wand also has a
22	processor,	right?
23	A	Correct.
24	Q	So the data that's sent from the FPGA processor
25	to the wan	d processor sorry, strike that.

```
1
              . Data is sent from the FPGA processor to the
    wand -- from the wand to the processor on the computer,
 2
 3
    correct?
         A
              Correct.
              And that's scan data, right?
         A
               Correct.
               And you referred to earlier you called that a
    sub-scan package; is that right?
 9
              Yes, that was one of the --
               Okay. So data from the FPGA is sent to the
10
    computer in the form of sub-scan packages; is that right?
11
               Yes, that was one of the data types, yes.
12
              And each sub-scan package includes the necessary
13
    information from a sub-scan for building a color
14
    three-dimensional model, correct?
15
              No.
         A
16
              It doesn't?
         0
17
18
         A
               No.
               The computer that is coupled to the wand
19
     includes software called ScanSuite; is that right?
20
         A
              Correct.
21
               And that receives the sub-scan packages,
22
23
    correct?
         A
              Yeah, correct.
        Q And ScanSuite just translates the data format
25
```

```
1 into something that the TRIOS software application can
    understand; is that right?
 2
 3
              Yeah, correct, together with the encoder
    packages.
 5
               Okay. And the TRIOS application software
    resides on the PC, right, the computer?
              Yeah, correct.
         A
         Q Along with ScanSuite?
         A Correct.
 9
              And the TRIOS application software puts all the
10
11
    sub-scans together and builds a three-dimensional model;
    isn't that right?
12
13
         A Yeah, correct.
              And that's a color model?
        Q
14
               Correct.
15
        A
               MR. CONSILVIO: I think I do need to go on to
16
    the confidential record at this point to discuss details of
17
18
    the -- further details of the processing.
               JUDGE CHENEY: Okay.
19
               (Confidential session follows.)
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1	OPEN SESSION CONTINUED
2	JUDGE CHENEY: We're back on the public record,
3	and the Respondents have called their next witness, Allan
4	Hyldal. We'll probably just get him sworn in before it's
5	time for the break, so let's take our break now. We'll
6	resume at 3:11. We're off the record.
7	(Recess from 2:56 p.m. until 3:12 p.m.)
8	JUDGE CHENEY: Please take your seats. We're
9	back on the public record in Investigation 337-TA-1091. We
10	are about to hear from Allan Hyldal, who's been called by
11	Respondents.
12	Sir, will you please stand and raise your right
13	hand, and I will swear you in.
14	(Oath administered.)
15	JUDGE CHENEY: Please be seated.
16	Mr. Patnaik, proceed when you're ready.
17	MR. PATNAIK: Thank you, Your Honor.
18	ALLAN HYLDAL,
19	having been first duly sworn, was examined and testified as
20	follows:
21	DIRECT EXAMINATION
22	BY MR. PATNAIK:
23	Q Can you please state your full name for the
24	record?
25	A My name is Allan Hyldal

1 Q Do you speak English fluently? A 2 I do. 3 Are you currently employed? Q A I am. 5 Q Who is your current employer? A 3Shape A/S. 0 How long have you worked for 3Shape? 8 A I joined the company in December of 2013. 0 What is your current title? I am vice president of 3Shape orthodontics. 10 A What are your current job responsibilities as VP 11 Q of orthodontics? 12 13 I oversee the overall business strategy, and then I have the direct responsibility for product 14 management and product marketing. And then I work with our 15 subsidiaries to help develop their local business 16 strategies and support them with resources for trade shows 17 18 and such. Have you held any other positions at 3Shape? 19 When I was hired my title was director of the A 20 orthodontic business unit, but that title was later 21 converted into the vice president role. 22 As VP of orthodontics, are you familiar with 23 3Shape's Ortho System software? 24

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A

Yes.

25

- 1 Q What is Ortho System?
- 2 A It is a collection of functionality that enables
- 3 orthodontists and orthodontic lab technicians to analyze an
- 4 orthodontic treatment case and treatment-plan it, and then
- 5 subsequently design and manufacture sort of different types
- 6 of appliances.
- 7 Q Who is the target end user of Ortho System?
- 8 A That would be orthodontic lab technicians and
- 9 orthodontists with in-house labs.
- 10 Q What software falls under the Ortho System
- 11 umbrella?
- 12 A Can you say that again?
- 13 Q Sure. Sorry. What software falls under the
- 14 Ortho System umbrella?
- 15 A That would be -- the two main modules would be
- 16 Ortho Analyzer and Appliance Designer.
- 17 Q What is Ortho Analyzer?
- 18 A So Ortho Analyzer is a -- it's a module that
- 19 enables the user to analyze the intraoral situation and to
- 20 treatment-plan -- to plan the treatment, basically.
- 21 Q What is Appliance Designer?
- 22 A That's a CAD software tool that enables the
- 23 orthodontist or the user to design various types of
- 24 appliances.
- Q Are you familiar with something called Virtual

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Setup?
 2
                Yes.
                Can you please describe it briefly?
                So Virtual Setup is a part of Ortho Analyzer
    that enables a user to simulate a treatment plan. So use
     the setup software to create a virtual setup and the user
    functionality to simulate extractions or interproximal
    reductions so that the doctor can -- and also that the user
    can, you know, do various scenarios for how the treatment
    could be done before he actually starts doing it on the
10
11
    patient.
               Are you familiar with something called Edit
12
    Flexible Tissue?
13
               Yes.
14
         A
                Can you briefly describe Edit Flexible Tissue?
15
                It is a feature inside Ortho Analyzer that
16
     enables a user to basically cut the teeth from the gingiva.
17
                Is Edit Flexible Tissue a feature of Virtual
18
19
     Setup?
               No, it's not.
20
               Are you familiar with the functionality known as
21
     Indirect Bonding?
22
                Yes.
23
                Can you briefly describe Indirect Bonding?
24
                It's a collection of features and functions that
          A
25
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- 1 enables the doctor or the user to place brackets virtually
- 2 on the model set and use the prescription of the brackets
- 3 to plan the treatment and then subsequently design what's
- 4 called a transfer media, which is a sort of appliance that
- 5 can be used to virtually -- not virtually but indirectly
- 6 transfer the brackets into the mouth of the patient.
- 7 Q Are Virtual Setup, Edit Flexible Tissue, or
- 8 Indirect Bonding part of 3Shape's Dental System software?
- 9 A No, it's not.
- 11 A Yes.
- 12 Q What is it, if you could briefly describe it?
- 13 A Splint Designer is a -- it's a specific workflow
- 14 that enables the user to design various types of splints
- 15 such as mouth guards and night guards and sports guards.
- 16 Q Is Splint Designer available within Dental
- 17 System?
- 18 A It's a module that's sold separately that can be
- 19 sold with Dental System, yes.
- 20 O Are there any differences in Splint Designer as
- 21 it appears in Ortho System or as it appears as an add-on
- 22 for Dental System?
- 23 A Yes, there is. As it appears in Ortho System,
- 24 it's an integral part of the Appliance Designer. So it's
- 25 an integral part of the Ortho System workflow. When it

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1 appears from Dental System, it's a stand-alone module
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- 2 without a database. It's basically just an external
- 3 function that's called from the Dental System and then
- 4 returns the case back to Dental System again.
- 5 Q Is Virtual Setup part of Splint Designer?
- 6 A No.
- 7 O Does the copy of Splint Designer in Dental
- 8 System share data with Virtual Setup?
- 9 A No.
- 10 Q Is Edit Flexible Tissue part of Splint Designer?
- 11 A No.
- 12 O Does the copy of Splint Designer in Dental
- 13 System share data with Edit Flexible Tissue?
- 14 A No.
- 15 Q Is Indirect Bonding part of Splint Designer?
- 16 A No.
- 17 O Does the copy of Splint Designer in Dental
- 18 System share data with Indirect Bonding?
- 19 A No.
- 20 O Is it possible for a user to purchase either
- 21 Ortho System or Dental System without the other?
- 22 A Yes
- 23 O Are Ortho System and Dental System sold
- 24 separately?
- 25 A Yes, they are.

- 1 Q Is it possible for a user to purchase both Ortho
- 2 System and Dental System?
- 3 A Yes.
- 4 Q Are Ortho System and Dental System ever sold as
- 5 one integrated product?
- 6 A No, they're not.
- 7 O If a user purchases both Ortho System and Dental
- 8 System, will they have one version of Splint Designer?
- 9 A No, they will have two.
- 10 Q If a customer buys Ortho System without
- 11 hardware, how is that software delivered?
- 12 A It's downloaded from our cloud service.
- 13 O If a customer gets updates of Ortho System, how
- .14 is that software update delivered?
- 15 A It's also delivered through the cloud.
- 16 0 If you could turn in your binder to --
- 17 MR. PATNAIK: Actually, we do need to go on the
- 18 3Shape confidential record, Your Honor.
- JUDGE CHENEY: What's the nature of the
- 20 information?
- 21 MR. PATNAIK: The document itself, Your Honor,
- 22 is confidential. We have had testimony on it, snippets of
- 23 it, in different parts that counsel and I have let it go on
- 24 the screen, but not the whole document. I can just have
- 25 him -- I don't need it on the screen right now.

JUDGE CHENEY: If we can stay on the public 1 record and just look at the binder, that would be great. 2 MR. PATNAIK: We can do that. 3 Mr. Hyldal, can you look at what's been marked 4 as CX-858C, please. A Yes. 6 Do you recognize this document? 0 8 A Yes. 9 What is it? That is a software specification for Ortho 10 System 2017-1. 11 Does it address any specific issues? 12 Q A Can you say that again, please? 13 Does it address anything specific about Ortho 0 14 15 System? It shows how the different integration 16 capabilities in Ortho System are laid out. 17 And how is integration used in the context of 18 this document? 19 So integration basically means that there is a 20 well-defined interface between Ortho System and any of the 21 modules or systems that are described in this document. 22 Does that mean that Dental System and Ortho 23 System act together as one product? 24

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25

No. It actually means the opposite, that

- 1 there's a well-defined interface between the two systems
- 2 and there's a well-defined protocol for how data is
- 3 exchanged, just as there are a well-defined protocol for
- 4 how data is exchanged with practice management systems.
- 5 Q Is that because they're separate products?
- 6 A Yes.
- 7 Q Are you familiar with the Complainant Align
- 8 Technology?
- 9 A I am.
- 10 Q Have you had any professional interactions with
- 11 Align since joining 3Shape?
- 12 A Yes. Ever since I joined in December of '13,
- 13 I've had several interactions with them. I mean, it's a
- 14 small industry, so we tend to meet each other at trade
- 15 shows, and at every congress, there's a round, and I've
- 16 been in dialogue with them since pretty much the beginning
- 17 of my tenure to talk about how we could integrate TRIOS to
- 18 Invisalign.
- 19 Q Was a contract to integrate 3Shape TRIOS
- 20 scanners with Invisalign ultimately signed?
- 21 A Yes.
- 22 MR. PATNAIK: Same thing, Your Honor, I'm going
- 23 to speak about a confidential document right now, but it
- 24 doesn't -- we don't need to go on the confidential record
- 25 because I'm not going to show it quite yet.

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JUDGE CHENEY: Okay.
 1
 2
                MR. PATNAIK: But when I do, I will have to
 3
     switch to confidential.
 4
                JUDGE CHENEY: Okay.
               Could you please turn in your binder to JX-163C,
 5
         0
     please.
         A
               Yes.
              Do you recognize this document?
         A
               Yes.
         0
               What is it?
10
11
                That is the agreement that Align Technology and
     3Shape ultimately signed that would define how the TRIOS
    scanner could be used to send cases to Invisalign.
13
         Q
              Do you remember when it was executed?
14
              That was in December of 2015.
15
         A
               You said that 3Shape and Align had been
16
    discussing some type of integration before you joined; is
17
    that right?
18
              That's correct.
19
               Can you describe the initial interactions with
20
    Align regarding the interface?
21
               Yes. When I joined the company, one of the
22
    first tasks I was given by our CEO, Flemming Thorup, was to
23
    try to establish an interoperability agreement between
    TRIOS and Invisalign. And so I was consulting with our
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- 1 teams that had had dialogue with Align in the past, and
- 2 from -- based on that, I reached out to Srini Kaza to start
- 3 the dialogue and see if there was an interest of opening up
- 4 the dialogue about the integration again.
- 5 Q Are you familiar with something called a
- 6 validation process with respect to the interoperability?
- 7 A Yes. One of the information that we got from
- 8 Align was that there was a quite rigorous validation
- 9 process we had to go through in order to prove that the
- 10 scanner was qualified to send to Invisalign.
- 11 Q Do you recall what the validation process
- 12 entailed?
- 13 A So it was quite a rigorous process that entailed
- 14 that 3Shape had to scan at least a hundred patients with at
- 15 least ten different doctors and ten different scanners with
- 16 the objective to prove both the accuracy of the scanner but
- 17 also the repeatability of the workflow for the doctor. And
- 18 so the purpose was to establish not only a qualification of
- 19 the scanner but also a smooth workflow for the operator.
- 20 O Who from 3Shape was handling discussions with
- 21 Align?
- 22 A I was.
- 23 Q Sorry, about interoperability?
- 24 A I was handling those discussions.
- 25 O Who was the primary counterpart from Align?

- A At this point this would have been Srini Kaza.
- Q Were there discussions about TRIOS/Invisalign
- 3 integration -- strike that.
- 4 Did your discussions with Mr. Kaza and Align
- 5 continue through December 2015 when the scanner agreement
- 6 was eventually signed?
- 7 A No. The discussions were terminated again after
- 8 a couple of months.
- 9 Q Do you know why they were terminated?
- 10 A I was informed by Mr. Kaza that Align had
- 11 decided not to proceed, that Tim Mack of the company had
- 12 made the decision not to proceed with 3Shape.
- 13 Q Do you know why Mr. Mack called off the
- 14 discussions? .
- 15 A At the time, we were informed that this was for
- 16 business reasons.
- 17 Q Were there any other reasons identified?
- 18 A We were also informed that there were legal
- 19 reasons.
- 20 O Do you know what they meant by "legal reasons"?
- 21 A Well, we were informed by Mr. Mack that there
- 22 was some patent infringement issues that had to be resolved
- 23 before we could proceed with the agreement. And so at the
- 24 time, the discussions were terminated.
- 25 Q Do you know whether 3Shape ever asked Mr. Mack

1 to provide any further information about those patent allegations? Mr. Thorup, who was the CEO of the company at 4 the time and who had known Tim Mack from before, he reached 5 out to Mr. Mack and asked for an explanation, and Mr. Mack never came back to us about it. Q Did you hear from anywhere else any allegations of patent infringement? 9 A Yeah. We did hear from others that there had been -- that there were reasons -- patent infringement 10 reasons which meant that Align probably would not be 11 validating the scanner. MR. PATNAIK: I do need to go to the 13 14 confidential record now, Your Honor. JUDGE CHENEY: Okay. Whose confidential 15 information is this? 16 MR. PATNAIK: This is 3Shape confidential. 17 (Confidential session follows.) 18 19 20 21 22 23 24 25

1	OPEN SESSION CONTINUED
2	JUDGE CHENEY: We're on the public record.
3	BY MR. PATNAIK:
4	Q Can you once again look at JX-163C in your
5	binder, Mr. Hyldal.
6	A Yes.
7	Q Can you show me where you believe the scanner
8	agreement acknowledges 3Shape's work with other clear
9	aligner companies, please?
10	A Yes. So if you turn to page 1, section 1.1 I
11	believe it's the last paragraph. It says, likewise, the
12	parties agree that supplier may enable and provide scans
13	from supplier's products to other providers of orthodontic
14	treatment systems, including other manufacturers of clear
15	aligners.
16	Q Can you also show me where you believe the
17	scanner agreement acknowledges 3Shape's Ortho System
18	software, please?
19	A Yes. Turn to page 3, section 3.6, I think it's
20	the first paragraph on page 3, it says, Align acknowledges
21	that supplier [inaudible] software solution currently
22	contains functionality that can be used to analyze a set of
23	digital impressions, help diagnose a patient's oral
24	situation, plan a treatment, and simulate tooth movement in
25	a virtual setup using supplier's treatment planning

- 1 software. This functionality is used by supplier's
- 2 customers internationally for treatment planning and by
- 3 labs for manufacturing of indirect bonding, retainers,
- 4 splints, sleep apnea appliances, and other types of
- 5 orthodontic appliances, which would include clear aligners.
- 6 Q How did 3Shape feel about entering into the
- 7 scanner agreement with Align?
- 8 A I mean, we were excited. This was a great
- 9 opportunity, we felt, for both companies.
- 10 Q Did 3Shape and Align ever publicly announce the
- 11 TRIOS/Invisalign interoperability? .
- 12 A Yes. We made -- I think we made two public
- 13 announcements, one when the agreement was signed and later
- 14 when the interoperability was actually commissioned.
- 15 MR. PATNAIK: Before I continue, Your Honor, I
- 16 noticed that the JX version that we put on the screen was
- 17 basically illegible. Can I work with counsel and get the
- 18 most legible copy of this agreement for the exhibit
- 19 binders?
- JUDGE CHENEY: That would be great.
- 21 MR. PATNAIK: For what we submit eventually. I
- 22 don't mean for this witness.
- JUDGE CHENEY: Maybe you can also take a stab at
- 24 redacting and having a public version that has a similar
- 25 number or something like that.

- 1 MR. PATNAIK: We'll take a look. JUDGE CHENEY: Since you're going to all that 2 3 effort. MR. PATNAIK: Sure. 5 Mr. Hyldal, can you turn to JX-246, please, in your binder. A Yes. Do you recognize this document? 9 Yes. This is the joint press release that was made between Align and 3Shape announcing that -- the new 10 workflow of integrating the TRIOS scanner with the 11 Invisalign case submission workflow. 12 Did 3Shape need to do anything to establish that 13 interface? 14 We did. I mean, at the time -- as I mentioned 15 before, we already had several integrations to other 16
- treatment providers at the time, but Align had a different 17
- 18 way of doing it that they wanted us to pursue. So we had
- to build quite a lot of back-end functionalities to support 19
- the integration process. 20
- Did 3Shape and Align complete the validation and 21
- eventually open the interface?
- 23 We did.
- When did that happen? 24
- That happened in October of 2016. 25 A

- 1. Q Was it surprising for it to take almost a year
- 2 to validate it?
- 3 A Yeah. I think it took a lot longer than it had
- 4 to. I was informed by Mr. Kaza that it was due to some
- 5 internal SAP upgrade issues that Align was having at the
- 6 time, and so -- you know, I don't think we got a really
- 7 credible explanation for why it was. We were surprised.
- 8 Q Can you turn to RX-1279, please.
- 9 A Yes.
- 10 Q Do you recognize this document?
- 11 A Yes. This is the press release that was issued
- 12 when the first TRIOS scan was sent for Invisalign case
- 13 submission.
- 14 . Q Did 3Shape change any of its business practices
- 15 based on the interface opening?
- 16 A We did. I mean, part of the discussion, and
- 17 that's also reflected in the agreement, was that 3Shape had
- 18 to present and promote Invisalign as our preferred clear
- 19 aligner partner. So we created a special website and we
- 20 made it very, very easy for doctors to connect to
- 21 Invisalign. And so we did not do that for any other of our
- 22 integration partners at the time.
- 23 Q You had not promoted any other clear aligner
- 24 partners before that?
- 25 A We had basically listed them so that they were

- 1 known to people, but we did not promote any of them
- 2 actively.
- 3 Q And did any of them have a separate website like
- 4 Align did?
- A No, none of them had a separate website.
- 6 Q From 3Shape's perspective, was the interface
- 7 between TRIOS and Invisalign successful?
- 8 A It was very successful. I mean, pretty much
- 9 from the time we announced the integration, a lot of
- 10 doctors started to sign up to be on board when the
- integration eventually opened. And after the integration
- 12 opened, we saw a -- I would say even a surprisingly fast
- 13 growth of cases being submitted. It was very successful.
- 14 Q How do you know how many doctors signed up and
- 15 how many TRIOS cases were sent to Invisalign?
- 16 A So part of the on-boarding process, we were
- 17 obliged to on-board people in a certain way, train them in
- 18 how to scan and train them in how to send. And so
- 19 everybody was signing up on our website and we were
- 20 on-boarding them one at a time. So we knew exactly who the
- 21 doctors were.
- Q Do the treatment providers also have access to
- 23 information about the TRIOS customer sending the scans?
- 24 A Yes. So each individual scanner is directly
- 25 connected to the provider. So the provider would know

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1 exactly which TRIOS users are sending them cases.
 2 Q And was that true for all the TRIOS/Invisalign
   interface scans?
         A It was, yes. So they knew exactly who the
 5 customers were.
 6
              MR. PATNAIK: Your Honor, now I do need to go on
  the 3Shape confidential.
             JUDGE CHENEY: Okay.
8
9
              (Confidential session follows.)
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1	OPEN SESSION CONTINUED
2	JUDGE CHENEY: We're back on the public record.
3	BY MR. PATNAIK:
4	Q What was 3Shape's perspective on the
5	TRIOS/Invisalign interface when Align sued 3Shape in
6	November 2017?
7	A Well, we certainly felt that it was a successful
8	partnership we had at the time. We felt that it was an
9	integration that was beneficial to both companies
10	commercially. We were selling more TRIOS scanners and they
11	were selling so many more Invisalign cases. So we were
12	surprised that they sued us.
13	I mean, we had known about the, you know, patent
14	allegations from way before we started, and we had
15	commercially agreed on the interoperability agreement, the
16	scanner agreement, and so, you know, we were surprised that
17	they were bringing these things up again.
18	Q Did 3Shape ever consider terminating or not
19	renewing the scanner agreement?
20	A No.
21	Q Did 3Shape ever consider closing or asking Align
22	to close the TRIOS/Invisalign interface?
23	A No, we did not.
24	Q Did 3Shape close the iTero Dental System
25	interface?

- 1 A No, we did not, and it is still open today.
- 2 Q After Align sued 3Shape, did you have a chance
- 3 to speak with anyone at Align about the status of the
- 4 scanner agreement and interface and how they might be
- 5 affected by the lawsuits?
- 6 A Yeah.
- Our marketing director, Lars Lohn [ph] and
- 8 myself, we met with Raphael Pascaud at Greater New York in,
- 9 must have been November of 2017. And I explicitly asked
- 10 him about it, about this, and he confirmed that Align had
- 11 no intentions of closing the interface.
- 12 Q Did you do anything with that information?
- 13 A Well, later when they eventually did close the
- 14 interface, we communicated it to the market in a press
- 15 release.
- 16 Q Had you told management about that
- 17 communication?
- 18 A I had. We had -- obviously Lars and myself had
- 19 brought that information back to the management group and
- 20 had -- I mean, tried to establish an understanding that we
- 21 believed that they were not going to close the interface.
- 22 Q Could you please turn to what's been marked
- 23 JX-249.
- 24 A Yes.
- 25 Q Do you recognize this document?

- 1 A Yes. That is the press release I was referring
- 2 to.
- 3 Q And this was issued shortly after the
- 4 termination?
- 5 A It was. This was issued on December 19.
- 6 Q Other than your discussion with Mr. Pascaud, did
- 7 you hear anything between October of 2016 and December of
- 8 2017 about whether or not Align would close the interface?
- 9 A Yeah, we did. I mean, that was -- pretty much
- 10 from the time when the interface agreement was signed, we
- 11 started to hear rumors in the market that Align was never
- 12 going to build the interface.
- 13 Q How frequent were those rumors?
- 14 A I would say that rather frequent, maybe a couple
- 15 times every quarter.
- 16 Q Did you speak with anyone at Align about those
- 17 rumors?
- 18 A I did speak with Raphael Pascaud about it, and
- 19 he assured me that this was just, you know, a couple of
- 20 reps going loose and that it had nothing to do with Align's
- 21 corporate strategy, if you will.
- MR. PATNAIK: Your Honor, can we go back on
- 23 3Shape confidential, please.
- 24 JUDGE CHENEY: What's the nature of the
- 25 information?

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MR. PATNAIK: Internal business documentation.
 1 ,
 2
                (Confidential session follows.)
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OPEN SESSION CONTINUED

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2 BY MR. PATNAIK: 3 Q Can you turn to JX-165, please. 4 A Yes. Do you recognize this document? Yes. This is the press release that Align 6 issued where they informed the market that they have discontinued accepting scans from the TRIOS scanner in the United States. 9 Q This press release says that, The cutoff for 10 11 accepting new Invisalign cases from TRIOS scanners in the U.S. will be January 31st, 2018. 12 Do you know if the U.S. interface was closed on 13 that day? 14 15 A It was not. How do you know that? 16 Well, we -- like I said before, we monitor the 17 18 cases that are being sent, and several months later there 19 was a meeting and there was some e-mail interactions between the Align development team and the 3Shape development team by which the Align development team would 21 22 inform us that the interface had not been closed. 23 And then a little later on, on May 22, that as of today, the interface now was closed. 25 That's May 22, 2018?

- A May 22, 2018. And this is from new cases. Of course, it still remained open for existing cases. 3 The last sentence in the first paragraph of the press release says --JUDGE CHENEY: I'm sorry, why is all this 5 conversation about a press release released to the market confidential? MR. PATNAIK: I'm sorry, Your Honor, it could 9 have been public, starting with the introduction of the exhibit. 10 JUDGE CHENEY: We're back on the public record. 11 (A discussion was held off the record.) 12 JUDGE CHENEY: Now continue, Counsel. 13 BY MR. PATNAIK: . 14 Q The last sentence of the first paragraph of the 15 press release says, Doctors who need to submit additional 16 TRIOS scans for an existing Invisalign case for refinement 17
 - Do you understand what that means?
 - 20 A It means that if a doctor started an Invisalign

or additional aligners will still be able to do so.

- 21 case with his TRIOS scanner prior to Align announcing the
- 22 termination, that doctor would still be able to continue to
- 23 send refinement cases also after the date of the
- 24 termination.

18

25 Q Do you know how long those refinement cases

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- 1 could go?
- 2 A For Invisalign full cases, that could be up to
- 3 five years.
- Q Do you know if Align has since closed the
- 5 interface for these additional TRIOS scans?
- 6 A They have not.
- 7 Q What were your thoughts when you learned that
- 8 Align was terminating the scanner agreement and closing the
- 9 interface?
- 10 A Well, I was obviously surprised and I was also
- 11 very disappointed. Again, we felt that it was a very good
- 12 business relation that we had with Align and that it was a
- 13 win-win situation for both companies.
- 14 And, also, I was obviously very disappointed
- 15 that Align -- or that Raphael had told me that they
- 16 wouldn't shut it down and then shortly thereafter they did
- 17 it anyway.
- 18 Q Did termination of the interface have any effect
- 19 on 3Shape's sales?
- 20 A It did. It did affect our sales, especially in
- 21 the U.S.
- MR. PATNAIK: Your Honor, I do need to go back
- 23 to 3Shape confidential now.
- JUDGE CHENEY: Okay.
- 25 (Confidential session follows.)

1	. OPEN SESSION CONTINUED
2	JUDGE CHENEY: We're back on the public record.
3	BY MR. PATNAIK:
4	Q After Align terminated the agreement and closed
5	the U.S. interface, did you speak with anyone from Align
6	regarding whether the interface would be closed outside of
7	the U.S.?
8	A I did. Again, I spoke with Raphael Pascaud and
9	asked him about it. I mean, it was actually a bit of a
10	difficult situation for us because we only had one global
11	agreement and after that had been terminated, we didn't
12	really have any guidance or governance for what to do
13	outside of the U.S.
14	So I asked Raphael what we were going to do
15	about it. He confirmed that it was unclear, and he
16	promised that he would come back I think this was in the
17	beginning of the year come back with a conclusion or a
18	solution for how we were going to manage it, but I never
19	heard back from him.
20	Q To your knowledge, has Align closed the
21	TRIOS/Invisalign interface outside of the U.S.?
22	A No, it's still open today.
23	Q Do you have any information about why Align is
24	still accepting TRIOS scans outside the U.S.?
25	A No I don't

- 1 Q Did Align get any benefit from terminating the
- 2 scanner agreement?
- 3 A Well, obviously they had clear visibility into
- 4 who our customers were and, you know, from the letter that
- 5 we looked at before, they approached all of the TRIOS
- 6 customers with a very attractive offer where they could get
- 7 50 percent off on an iTero scanner.
- 8 And, also, since they -- since they announced
- 9 the termination and things around it just before Christmas,
- 10 we heard back from doctors that had already gone on
- 11 Christmas holiday and didn't come back until sometime in
- 12 January that they had very little time to make a decision,
- and a lot of people felt forced to take the offer and --
- 14 because they had to keep their business going, basically.
- 15 Q Going back to your comment about the TRIOS
- 16 customer base, why would a doctor make the switch to iTero?
- 17 A Well, for many doctors, the Invisalign business
- 18 is a significant part of their business. It's a
- 19 significant part of their revenue stream. And so if they
- 20 can't maintain that business, they basically had to buy the
- 21 iTero scanner.
- 22 O Did you attend the AAO Align town hall meeting
- 23 in Washington, D.C., in May 2018?
- 24 A Yes, I did.
- 25 Q Who from Align participated in that town hall?

- 1 A That would have been their general counsel,
- 2 Roger George, it would have been their general manager for
- 3 North America, Chris Puco, and I believe the CTO, Zelko
- 4 Relic.
- 5 Q Was 3Shape brought up during Align's comments at
- 6 the town hall meeting?
- 7 A Yeah. There were basically three topics on the
- 8 agenda and 3Shape was the first topic. And I think it was
- 9 Roger George who explained -- I mean, they get a chance to
- 10 explain the situation, and they said that they felt --
- 11 Align felt that the partnership with 3Shape had gone in a
- 12 wrong direction from their perspective, and, therefore,
- 13 they wanted to bring back some of the old IP issues, and,
- 14 therefore, they had to terminate the interface.
- Q Can you turn to RX-1290 in your binder.
- 16 A Yes.
- 17 Q Do you recognize this exhibit?
- 18 A Yes. This is a transcript from the town hall
- 19 meeting.
- Q Mr. Hyldal, knowing what you know today, would
- 21 3Shape have made the investments that it did in creating
- 22 the interface and validating the TRIOS scanner?
- 23 A No, we would not. I mean, it was a waste of
- 24 time and a waste of money. We're basically back to square
- 25 one, where we were when we started in 2013, only with the

- 1 difference that, you know, we haven't had any opportunity
- 2 to promote our other clear aligner partners and promote our
- 3 software, and so we kind of lost a lot of time in that
- 4 perspective.
- 5 Q Is that because you were promoting Invisalign?
- 6 A We were promoting Invisalign during that period,
- 7 yes.
- 8 Q And it was more than the other clear aligners?
- 9 A We did not really promote any of the other clear
- 10 aligners, according to the agreement we had with Align.
- 11 MR. PATNAIK: I. pass the witness, Your Honor.
- 12 JUDGE CHENEY: Is there any cross-examination of
- 13 this witness?
- MR. JACOBS: There is, Your Honor.
- 15 CROSS-EXAMINATION
- 16 BY MR. JACOBS:
- 17 Q Good afternoon, Mr. Hyldal. It's good to see
- 18 you again.
- 19 A Likewise.
- 20 Q Thank you for coming to Washington D.C. We
- 21 appreciate it.
- 22 A Thank you.
- 23 Q You mentioned that you were responsible at
- 24 3Shape for negotiating the interoperability agreement,
- 25 right?

1 A Correct. 2 So you have pretty deep knowledge relating to 3 that agreement. 4 That would be true, right? Yes, I would say so. 5 A And let's just level set. 6 0 7 You admit that there was absolutely nothing improper with Align's decision to terminate the 9 interoperability agreement. You admit to that, correct? 10 ·That is correct. 11 In fact, the interoperability agreement 12 expressly states that either party can terminate for 13 14 convenience, right? I believe so, yeah. 15 As long as 30 days' notice is provided, it was 16 mutually agreeable to both companies that it could be 17 18 terminated at will, right? A Right. 19 And Align did, in fact, provide that 30 days' 20 notice to 3Shape that the interoperability agreement was 21 being terminated. 22 Fair enough? 23 Fair enough. 24 A

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The agreement, just so we all understand it,

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only had a three-year term.
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- That's true as well, isn't it, sir?
- 3 A As I recall it, yes.
- 4 Q So it was set to expire in December of 2018
- 5 under the express provisions of the agreement.
- 6 True, sir?
- 7 A Yeah, I believe so.
- 8 Q Now, you agree, sitting here today, that even if
- 9 Align's motive for terminating the interoperability
- 10 agreement was to maintain its market share in clear
- 11 aligners, there would be nothing wrong with that.
- 12 You agree with that, right?
- 13 A I believe that they could terminate it at will
- 14 or for convenience, yes.
- 15 Q Right.
- 16 So just so we all understand, let's get a clear
- 17 answer on this.
- 18 You agree that even if Align's motive for
- 19 terminating the interoperability agreement was to maintain
- 20 its market share in clear aligners, there's nothing wrong
- 21 with that.
- You agree with that, don't you, sir?
- 23 A They could terminate it for convenience, yes.
- 24 Q So there's nothing wrong with Align terminating
- 25 this agreement if they wanted to keep their market share in

```
clear aligners.
               Yes. Correct?
               Correct.
 3
         A
               Thank you.
        Q
               So trying to maintain market share and improve
 5
    market share, that's what all companies do.
 6
               Fair enough?
 7
              Fair enough.
         A
              Okay. So Align filed these patent infringement
 9
     suits in November of 2017, correct?
10
         A
               Yep.
11
              And after that, 3Shape did not ask its U.S.
12
    resellers to stop selling the products accused of
13
14
    infringement, did you?
              No, I don't think we did.
15
               To the contrary. 3Shape continued to encourage
16
    its resellers to sell in the United States the 3Shape
    products that were accused of infringement.
19
               True, sir?
               I don't exactly know what we encouraged them to
20
    do. I didn't have that dialogue myself.
21
              Are you aware that you have told your resellers
         O
22
    not to sell?
23
         A
24
```

25 Q Thank you.

- 1 And you understand, sir, that encouraging the sale of products in the United States that infringe another company's patents is illegal. 3 Do you understand that? 4 5 It sounds reasonable. A 6 You've done nothing since the termination of the interoperability agreement to stop cases from being submitted from the TRIOS to the Invisalign in the United States, have you? No. We're not in a position to do that. 10 And you've done nothing to stop cases outside of 11 the United States. You haven't written to Align and asked 12 them to stop that, have you? 14 A No, we've not. And you are benefitting financially each time a 15 TRIOS submits an Invisalign case. 16 Fair enough? 17 No, we don't get anything out of that. 18 A Q Nothing at all, okay. 19
- 22 A That's correct.

20

21

right?

- Q When you joined, you took over the
- 24 responsibility within 3Shape for communicating with Align.
- 25 I think you've told me that before.

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You joined 3Shape at the end of 2013; is that

```
1
                Is that right?
 2
                That's correct.
 3
                Let's go, if we could, and take a look -- you
     have a binder from us as well, sir.
 5
                MR. JACOBS: And, Your Honor, I believe this
     next document is a confidential internal 3Shape document.
 6
                JUDGE CHENEY: Okay.
 7
 8
                Let's go off the record for a minute.
                (A discussion was held off the record.)
 9
                JUDGE CHENEY: Hearing no objection, we're back
10
     on the record, the public record right now.
11
                And where were you leading us, Mr. Jacobs?
12
                MR. JACOBS: Yes, Your Honor. There was a
13
    .3Shape document that I was going to look at. It is
15
    RX-813C.
                Let me do this, Your Honor. I'll ask some
16
17
     questions, and if I can get the answers that I need, then I
     don't need to pull the document up. I'll just go ahead and
18
19
    proceed on the public record, Your Honor.
                JUDGE CHENEY: Okay.
20
               Mr. Hyldal, in 2014, 3Shape and Align were
21
22
    discussing potential interoperability; is that correct?
         A
23
              Yes.
                But 3Shape failed its initial prescreening with
    Align at that point in time, right?
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A No, I don't believe so.
        Q 3Shape failed due to problems with its
3 aligners -- I mean, with its scanners, right?
     A No, I don't think we came to a conclusion on
5
    that.
 6
        Q Okay.
              MR. JACOBS: Let's go ahead and -- we're going
7
   to have to, Your Honor, go on the confidential record now.
               JUDGE CHENEY: Okay. 3Shape confidential
9
10
    record.
               (Confidential session follows.)
11
12
13
14
15
16
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21
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23
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25
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1 OPEN SESSION CONTINUED 2 JUDGE CHENEY: Okay. We're back on the public record. 3 BY MR. JACOBS: 5 And you looked a little bit at the interoperability agreement during your direct examination. It is JX-0163; is that right, sir? Yes, that's correct. 8 A Now, the agreement is between 3Shape TRIOS A/S, 9 and you were not a 3Shape TRIOS A/S employee. 10 That is correct, right, sir? 11 That is correct. 12 A Now, please take a look at section 4 of the 13 agreement, if you could, please. 14 15 A Yes. This provision relates to intellectual property; 16 is that correct? 18 Correct. Now, you recall that during your deposition, you 19 told me that you suggested edits to this provision during the negotiations that led to the agreement, right, sir? 21 22 A Yes. 23 The intent of the changes that you made were to make sure that 3Shape maintained its intellectual property rights and that Align separately maintained its

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- intellectual property rights, correct, sir?
- 2 A Correct.
- 3 Q Now, also section 4 has a statement in it, and I
- think we can pull just this statement up. It's a statement
- 5 relating to license, if we could, please.
- 6 So within section 4, it states that, No license
- 7 or right is granted by implication or otherwise with
- 8 respect to any patent, and then it goes on to say, not
- 9 specifically set out in the agreement.
- 10 So the agreement basically states expressly that
- 11 no license is being provided either implicitly or expressly
- 12 with regard to patents that aren't specifically set out in
- 13 the agreement, right, Mr. Hyldal?
- ·14 A Correct.
- 15 Q And specific Align patents are not mentioned
- 16 anywhere in the interoperability agreement, true, sir?
- 17 A True.
- 18 Q So, therefore, you agree that clearly Align
- 19 maintained all of its intellectual property rights to its
- 20 patents notwithstanding that it entered into the
- 21 interoperability agreement with 3Shape. Fair enough?
- 22 A I don't think I can judge the legal conclusion
- 23 on that, but it was definitely implicit understanding that
- 24 Align was authorizing us to use our scanner for the
- 25 agreement.

- 1 Q Well, I asked you something very similar at your
- 2 deposition. So you have your deposition in your binder, if
- 3 you could, please, sir. And I'm going to direct your
- 4 attention to the transcript. You're going to have a
- 5 transcript there, and it's going to have page numbers, and
- 6 it's going to have some line numbers. If you could turn to
- 7 page 305, lines 10 through 18.
- 8 And in your deposition, I said, You agree --
- 9 A Just one second.
- 10 Q And it's on the screen in front of you as well,
- 11 sir.
- 12 I said, You agree that each party maintains its
- 13 distinct intellectual property rights under the term of the
- 14 scanner agreement, right?
- 15 You said, Unless it specifically mentioned that
- 16 is accepted.
- 17 And I said, Right. And Align's patents are not
- 18 specifically mentioned in the scanner agreement. You can
- 19 agree with that, sir?
- 20 And you said, Yes.
- 21 So that was your testimony there and that's
- 22 correct today; isn't it, sir?
- 23 A That's correct.
- 24 Q So section 18, if we can turn back to the
- 25 agreement, please. That's JX-0163.

1 This is the governing law provision of the scanner agreement. I think you probably remember, sir, we 2 3 talked about this a good bit during your deposition, do you remember that? 5 A Yes. Now, it states in section 18, This agreement and 6 any dispute or claim arising out of it or in connection with it, and then it goes on to say, shall be governed in accordance with the laws of Denmark. 10 Now, Mr. Hyldal, you understand what the word "arise" means in this context. It means coming out of or 11 in relation to, right? 12 A Yes. 13 So the governing law provision does not state 14 15 that it covers a dispute coming out of or in relation to any intellectual property disputes between the parties. It 16 doesn't expressly state that, does it? 17 MR. PATNAIK: Your Honor, the line of 18 questioning is basically calling for legal conclusions and 19 20 interpretation of a contract. He's never -- we haven't asked that he provide legal opinion. 21 MR. JACOBS: Your Honor, if you recall, this is 22 a position that has been maintained and I believe the Court 23 ruled with regard to a summary determination motion that

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there might be some factual issues that still relate to

- 1 this very question, and this is the individual who drafted
- 2 the agreement. He was involved in the negotiations that
- 3 pertained even to this clause.
- 4 JUDGE CHENEY: My memory might not be as good as
- 5 yours, Mr. Jacobs. Can you point any in my order to where
- 6 I said there were some factual issues?
- 7 MR. JACOBS: I have to get the order.
- JUDGE CHENEY: I remember a part of the order
- 9 that said, if you think there's a problem here, you can go
- 10 to a District Court and get an injunction stopping this
- 11 case, and no one-did. That's the part I remember.
- MR. JACOBS: I remember that part as well. I'm
- 13 fine with that part, Your Honor.
- JUDGE CHENEY: No one did that.
- 15 MR. JACOBS: I agree with you, Your Honor.
- JUDGE CHENEY: Okay.
- MR. JACOBS: We'll move on, okay?
- 18 Q So turn to JX-0319 in your witness binder, if
- 19 you could, Mr. Hyldal.
- 20 A Yes.
- 21 Q And at the bottom of the first page, there's an
- 22 e-mail from Mr. Pascaud to you, among others, it's dated
- 23 December 3, 2015. That was a time period when you were
- 24 still negotiating the agreement; is that correct, sir?
- 25 A Yes, I would say so.

- 1 Q And you'll see that Mr. Pascaud wrote to
- 2 Flemming Thorup and he copied you on a message stating
- 3 that, Align was okay with 3Shape's suggested approach
- 4 except for any patent IP matters which would need to be
- 5 dealt with in the appropriate courts.
- 6 You see that language there, sir?
- 7 A Yes.
- 8 Q And you --
- 9 MR. PATNAIK: Your Honor, I thought we just
- 10 decided we're going to move on from this issue.
- MR. JACOBS: Your Honor, I'm asking him to
- 12 clarify exactly what's in the agreement. They've made this
- 13 agreement into a big deal during this investigation. If
- 14 they want to drop the issues that they've raised relating
- 15 to the agreement, then we're happy to move on, but they
- 16 have refused to do so.
- 17 MR. PATNAIK: Your Honor, we lost the venue
- 18 issue, and this is all about venue.
- 19 MR. JACOBS: This is about licensing, Your
- 20 Honor. This is about what the agreement relates to, what
- 21 it pertains to and where disputes would have to be
- 22 resolved.
- JUDGE CHENEY: Can you-all just stop talking for
- 24 a minute?
- 25 Mr. Patnaik, I think your objection is to a

- 1 discussion about the state of mind that is represented in
- 2 JX-319C? Is that what you're saying?
- MR. PATNAIK: No, Your Honor. My objection is
- 4 to talking about the venue provision when we were just told
- 5 that they're not relitigating the order that we lost on the
- 6 motion to transfer.
- JUDGE CHENEY: So what I'm seeing here is that
- 8 he's directing the witness's attention to the bottom of
- 9 JX-319C and asking about the time period negotiating the
- 10 agreement. Is that your understanding of what the pending
- 11 question is about?
- MR. JACOBS: Yes, Your Honor. It was just
- 13 before the agreement was entered into.
- JUDGE CHENEY: I'm asking Mr. Patnaik.
- 15 MR. PATNAIK: I wasn't sure what the e-mail was
- 16 about. I just saw the choice of law and the Amsterdam and
- 17 Copenhagen and the line, except for any patent IP-related
- 18 matters which would need to be dealt with in the
- 19 appropriate courts, that to me falls under the umbrella of
- 20 choice of law, choice of venue.
- JUDGE CHENEY: Okay. Overruled.
- 22 Continue, sir.
- MR. JACOBS: Thank you, Your Honor.
- 24 Q So in response to this e-mail to Mr. Thorup that
- 25 you were copied on, Mr. Hyldal, you did not oppose what

- 1 Mr. Pascaud was expressing in the e-mail, and, in fact, you
- 2 entered into the agreement just a few weeks later; isn't
- 3 that correct, sir?
- 4 A Yes.
- 5 Q So you told me during your deposition,
- 6 Mr. Hyldal, that you were not aware of 3Shape monitoring
- 7 competitors' patents. Do you recall that?
- 8 A Can you say that again?
- 9 Q Sure. You told me during your deposition that
- 10 you were not aware of 3Shape monitoring its competitors'
- 11 patents. Do you recall that?
- 12 A I don't recall exactly how we say it, but we
- don't consistently monitor competitors' patents.
- 14 Q In fact, in 2017 you yourself asked for, I think
- 15 it was mid part of 2017, a pretty big analysis of Align's
- 16 patents; isn't that true, sir?
- 17 A Yes, I believe so.
- 18 O And, if you recall, as part of your monitoring
- 19 of Align's patents, at one point in time, you wrote to
- 20 somebody within the company that you might not be able to
- 21 use ClinCheck until at least 2020 because of Align's
- 22 patents. Do you recall that correspondence, sir?
- MR. PATNAIK: Your Honor?
- JUDGE CHENEY: What is the objection?
- 25 MR. PATNAIK: We're talking about documents that

we ruled earlier could not be introduced in this court. MR. JACOBS: Your Honor, it's cross-examination. 2 I can refresh his recollection. I can ask him questions. 3 I'm not moving to admit this as an exhibit. It's certainly fair game for questioning, Your Honor. 5 6 JUDGE CHENEY: Overruled. MR. JACOBS: Thank you, Your Honor. So you did at some point in time indicate with regard to the study in 2017 that 3Shape might not be able to make either simulator or ClinCheck until after 2020. 10 11 And you said, That is a problem. Do you recall that, sir? 12 I don't recall the actual wording of how that --13 A It sounds like something you could have said 14 during that time period? 15 Kind of depends on what the context of the 16 sentence was. 17 18 (Reporter interruption.) JUDGE CHENEY: I'm going to re-read the 19 20 question. You did at some point in time indicate with 21

22

23

24

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regard to the study in 2017 that 3Shape might not be able

to make either simulator or ClinCheck until after 2020?

And you said, That is a problem.

Do you recall that, sir?

```
THE WITNESS: I don't recall exactly how those
 1
     words were flowing, and I think it needs to be seen in the
     context of which it was written.
 4
              Sir, yes or no, do you recall that?
              I don't recall it to the words.
 5
         Δ
              Sir, yes or no, do you recall that?
 6
         Q
              No, then I don't recall it.
              Can I direct your attention in your binder, if I
 8
         Q
    could, please, sir, to CX-1602C.
 9
               MR. PATNAIK: Your Honor, I'm not objecting to
10
     the question. I'm just raising for the record that this is
11
    one of those documents that we talked about earlier today
12
    that were produced late.
13
               MR. JACOBS: I'm not asking to have this
14
     admitted into evidence, Your Honor.
15
16
               JUDGE CHENEY: Okay.
               MR. JACOBS: Thank you, Your Honor.
17
               So I want you to read to yourself, if I could --
19
     if you could, Mr. Hyldal, the e-mail that you wrote on June
     26, 2017, at 4:04 a.m., and it appears that you wrote it to
20
     a patent agent, a Ninne-Grønne within 3Shape. And if you
    could read that whole e-mail and continuation of. Can you
22
    read that to yourself, sir?
23
         A
                Yes.
```

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So having read that e-mail to yourself, does

- 1 that refresh your recollection about whether in June of
- 2 2017, you stated to somebody, a patent agent within the
- 3 company, that it looks like you could not make either
- 4 simulator or ClinCheck until 2020, that is a problem? Does
- 5 that refresh your recollection, sir?
- 6 A It does, yes.
- 7 Q Okay. So let's move on, if we could. Now, sir,
- 8 answer one question for me. If you had a license in 2017
- 9 to Align's patents, there would have been no problem with
- 10 making ClinCheck and Simulator at that point in time if you
- 11 had a license to their patents, right? That's correct,
- 12 isn't it?
- 13 A Yeah, I would say so.
- 14 Q Thank you, sir.
- Now, you stated on direct that you had a
- 16 conversation with Mr. Pascaud at some point in time, and
- 17 Mr. Pascaud raised some concerns I guess about intellectual
- 18 property; is that right?
- 19 A Mm-hmm.
- 20 Q And we talked about this at your deposition. Do
- 21 you recall that?
- A Not exactly, no.
- 23 O So Mr. Pascaud never said that it's going to be
- 24 difficult to engage with 3Shape in an interoperability
- 25 situation because actually this conversation between you

- and Mr. Pascaud and Mr. Deichmann took place a little bit
- 2 after the interoperability agreement was entered into. Do
- 3 you recall that, sir?
- A Are you referring to the meeting at Greater New
- 5 York?
- 6 Q Yes, sir.
- 7 A Okay.
- 8 Q You recall that one now, sir?
- 9 A Yes, I do.
- 10 Q Okay. And so that was a follow-up meeting after
- 11 the agreement, had been entered into, true?
- 12 A Correct.
- 13 O And neither you nor Mr. Deichmann ever followed
- 14 up on this conversation from Mr. Pascaud, never got back to
- 15 him on that one; is that right, sir?
- 16 A I don't believe we did, no.
- 17 O And you did not take any step to check and see
- 18 whether what Mr. Pascaud said might be something that
- 19 3Shape should be concerned about, did you sir?
- 20 A We did not know anything specific about what he
- 21 was referring to.
- 22 Q You didn't take any steps to check and see
- 23 whether what Mr. Pascaud said might be something that
- 24 3Shape should be concerned about. That's true, isn't it,
- 25 sir?

- 1 A That's correct.
- 2 Q Thank you sir. So you mentioned trade shows
- 3 during your direct examination. 3Shape attends a fair
- 4 amount of trade shows. That's correct, right, sir?
- 5 A Yes.
- 6 Q You were at AAO I think you mentioned earlier
- 7 this year; is that correct?
- 8 A Correct.
- 9 Q And at these trade shows, 3Shape is displaying
- 10 its products such as its TRIOS, its Ortho System software.
- 11. They're displaying that to the public and orthodontists,
- 12 things of that nature, right, sir?
- 13 A Right.
- 14 Q And they demonstrate these products at trade.
- 15 shows because they're hoping that somebody will buy the
- 16 products. That's fair, isn't it, sir?
- 17 A Yes.
- 18 Q And you work with resellers in the United
- 19 States. That's correct, isn't it, Mr. Hyldal?
- 20 A Yes.
- 21 Q And you want those resellers to sell your
- 22 products to customers in the United States. That's
- 23 something that 3Shape generally wants, right, sir?
- 24 A Correct.
- 25 Q A couple of questions with regard to Splint

- 1 Designer, I want to confirm, Splint Designer is part of
- Ortho System, right?
- 3 A Correct.
- 4 Q And it can be called in Dental System as part of
- 5 a separate module, fair enough?
- 6 A Right.
- 7 Q You said Ortho System was delivered to customers
- 8 by the cloud. Do you recall that testimony?
- 9 A Yes.
- 10 Q That was not the case, just so that we're all
- 11 clear, prior to February of 2018, true, sir?
- 12 A I don't exactly know which date it changed, but
- 13 it's correct that in the past, it was done differently.
- 14 Q So just so that we all understand, this case was
- 15 filed, and at some point in time after this investigation
- 16 was filed, 3Shape decided to provide Ortho System and its
- 17 software via the cloud. Fair enough?
- 18 A At some point in time. I don't know when it was
- 19 done.
- 20 Q But you know it was after the filing of this
- 21 case? You know that, don't you, sir?
- 22 A Yeah, I believe so.
- 23 Q Now, you discussed some interoperability
- 24 discussions, and you mentioned that there was further joint
- 25 development scenarios that were discussed between the

- 1 parties. That's fair, isn't it?
- 2 A Correct.
- 3 Q And you, in fact, were at a meeting at one point
- 4 in time where Mr. Deichmann and you spoke with Mr. Pascaud
- 5 I believe it was at that New York show about some possible
- 6 joint ventures between the parties, right?
- 7 A Correct.
- 8 Q And you recall that what Mr. Deichmann proposed
- 9 at that meeting was that Align close down its scanner
- 10 division and serve as an OEM for 3Shape? You recall that's
- 11 what he proposed, right, sir?
- 12 A I think he proposed that 3Shape would be willing
- 13 to provide Align with scanning technology.
- 14 Q And basically as an OEM, right, sir?
- 15 A I don't think those words were used at the time.
- 16 Q You mentioned that -- Mr. Mack I think at some
- 17 point in time you had heard had provided some information
- 18 about potential IP concerns; is that right?
- 19 A Yes, I believe so.
- 20 Q There were no patent numbers that you ever heard
- 21 about, that's true, right?
- 22 A That's true.
- 23 O No open threats of lawsuits were raised by
- 24 Mr. Mack to anybody directly that you ever heard about?
- 25 That's right, sir, right?

- 1 A I didn't hear about that.
- 3 3Shape as part of the negotiations with Align. That's
- 4 true, isn't it?
- 5 A Yes.
- 6 Q And so 3Shape made sure that non-exclusivity
- 7 actually was in the final written agreement between the
- 8 parties, right?
- 9 A Yes.
- 10 Q So if receiving an express license, for example,
- 11 was important to 3Shape as part of the negotiations with
- 12 Align, you could have asked for and tried to get that into
- 13 the interoperability agreement as well. That's fair
- 14 enough, right, sir?
- 15 A Yes.
- 16 Q Now, you testified that 3Shape had put in some
- 17 efforts and work as a result of the agreement with Align.
- 18 Is that true, sir?
- 19 A Yes.
- 20 Q But you understand at the same time and you
- 21 understood all along that the agreement between 3Shape and
- 22 Align was mutually terminable at any point in time with 30
- 23 days' notice? You knew that all along, right, sir?
- 24 A Yes.
- 25 JUDGE CHENEY: Okay. Seems like a nice place to

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1 stop since it sounds very much like where you started. Is
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- there going to be more cross-examination?
- 3 MR. JACOBS: I have a few more questions
- 4 probably, Your Honor. I can do it now if you want me to.
- JUDGE CHENEY: Let's do it now.
- 6 MR. JACOBS: Okay.
- 7 Q Now, you talked a little bit about Align
- 8 accepting cases from TRIOS in 2018, I guess even in May of
- 9 2018, right?
- 10 A Yes.
- 11 Q You don't think there's anything wrong with
- 12 that. That's true, right?
- 13 A I find it just peculiar, but other than that,
- 14 nothing wrong.
- MR. JACOBS: Thank you.
- I have no further questions, Your Honor.
- JUDGE CHENEY: Okay.
- 18 MR. PATNAIK: Your Honor, short redirect so we
- 19 can let the witness go so he doesn't have to come back
- 20 tomorrow?
- MR. JACOBS: We're not opposed to that.
- 22 MR. PATNAIK: I don't have much, just a little
- 23 bit.
- JUDGE CHENEY: Please keep it brief.
- MR. PATNAIK: Thank you, Your Honor.

REDIRECT EXAMINATION 1 2 BY MR. PATNAIK: Mr. Hyldal, you were asked some questions about 3 the intent of the agreement with respect to Align 4 maintaining its intellectual property. Do you remember 5 6 that? 7 A Yes. Did you understand that ownership of any patents 8 was supposed to change hands because of the agreement? 9 A No. 10 What was your understanding? . 0 11 My understanding was that there was an 12 understanding between the two parties that the TRIOS 13 scanner was -- that 3Shape could use the TRIOS scanner to 14 scan patients and send the cases to Invisalign. 15 And how about non-Invisalign cases? 16 True, that was also brought into -- that was 17 section 1.12, to other types of clear aligner providers, 18 19 yes. You testified before about the Ortho System? 20 A We were also -- it was also the intent of the 21 22 agreement that 3Shape's existing Ortho software could 23 continue to be used for orthodontic purposes. Counsel asked you some questions about 24 25 expiration of certain Align patents and an e-mail that he

- 1 discussed. Do you recall that?
- 2 A Yes.
- 3 Q Do you recall getting any response from your
- 4 questions or your comments from Mikal Ninne-Grønne?
- 5 A Yes. There was a brief assessment made of some
- 6 patents.
- 7 Q Were there any specific concerns identified?
- 8 A There were some concerns raised, but this was
- 9 based on a very early assessment, and we were starting to
- 10 explore the area, if you will, and that's the extent that
- 11 the investigation was made at -- at the time.
- 12 Q And what was the context? This was 3Shape
- 13 looking into clear aligners?
- 14 A So you're referring to the investigation that
- 15 was done in I think it was in June of -- summer of 2017?
- 16 Q Yes.
- 17 A So this was at a time where 3Shape was exploring
- 18 what avenues we would be able to take, and that's basically
- 19 where we came from at that point in time.
- 20 Q Do you have any familiarity with U.S. antitrust
- 21 law?
- 22 A No, I don't.
- 23 MR. JACOBS: Your Honor, it's outside the scope,
- 24 calls for legal testimony, totally irrelevant.
- 25 MR. PATNAIK: Your Honor, he asked if something

- 1 was proper under U.S. antitrust law to this witness.
- 2 MR. JACOBS: Your Honor, I will represent I did
- 3 not ask that question.
- 4 JUDGE CHENEY: It's just talking about what he
- 5 knows. I think we all know the answer. I'm going to
- 6 overrule the objection.
- 7 MR. PATNAIK: And I'm going to end with one more
- 8 question.
- 9 JUDGE CHENEY: The last question you asked was,
- 10 Do you have any familiarity with U.S. antitrust law?
- The answer was, No, I don't.
- 12 I overruled an objection. And now the ball is
- in your court.
- 14 Q Do you have any sense of what is proper or
- 15 improper under U.S. antitrust law?
- 16 A No, I don't.
- MR. PATNAIK: No further questions, Your Honor.
- 18 JUDGE CHENEY: Okay. Does anyone else have any
- 19 questions for this witness before I release him?
- 20 MR. JACOBS: He may be released, Your Honor,
- 21 thank you.
- 22 MR. PATNAIK: Nothing further, Your Honor.
- JUDGE CHENEY: Thank you, sir. I appreciate
- 24 your testimony. It helps me understand the case. You are
- 25 released.

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1
                THE WITNESS: Thank you.
 2
                (Witness excused.)
 3
                JUDGE CHENEY: Any housekeeping matters anyone
     wants to talk about at the end of the day?
 4
                MR. JACOBS: Your Honor, I think that when
 5
     Ms. Ondrick was conducting -- questioning a witness, it was
 7
    an Internet document that came up and you asked that we
    assign a number to it. CX-1620 is the next number for the
     record.
10
                JUDGE CHENEY: Okay. So CX-1620 is a printout
    of 3Shape's website purporting to show the different clear
11
    aligner brands that the 3Shape TRIOS is compatible with.
12
    Have I characterized that correctly? Anyone have any
13
    objection to that characterization?
14
15
               MR. JACOBS: That's correct, Your Honor.
16
               JUDGE CHENEY: Okay. Thank you. Any other
    housekeeping matters?
17
               MR. PATNAIK: Nothing from us, Your Honor.
18
                MR. JACOBS: Nothing further, Your Honor.
19
20
                JUDGE CHENEY: So because I chided some people
    at the beginning of the investigation about not keeping to
21
    their witness estimates, I will note that the 60-minute
22
    examination of Mr. Hyldal went far beyond that. And I want
23
    to know where you-all stand on time. Can someone tell me
24
25
    some numbers?
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MR. PATNAIK: Your Honor, we have numbers as of 2 yesterday. I haven't seen a compilation for today as far 3 as the split on the parties' respective time allocations. But we can do that tonight and meet and confer with counsel and come to you tomorrow morning with a status check. 5 JUDGE CHENEY: Okay. I want to hear time when 6 7 we reconvene in the morning. So we've gotten through more 8 than half of the hearing. That's great. And I can tell from the volume and speed of your voices that everyone is 9 10 getting a little bit excited, maybe because you're tired. This is my pep talk to you to try to remain as professional 11 as possible. I know that you're tired because I see the 12 time stamps on your e-mails. And it looks like you're up 13 all night. I don't know how you're doing it. But maybe go 14 for a walk tonight. It's beautiful weather. Get your 15 blood pressure lowered. Think about something other than 16 this investigation for 15 minutes. And you're all doing a 17 18 yoman's task, and I appreciate all the effort you make to keep the trial moving and to treat each other with 19 20 professionalism and respect and the witnesses. 21 If there's nothing else, we're off the record for the evening. I'll see you tomorrow morning. 22 23 (Whereupon, at 4:39 p.m., the hearing was adjourned, to be reconvened at 9:00 a.m., on Thursday, 24

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September 20, 2018.)

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CERTIFICATE OF REPORTER

TITLE: In The Matter Of: Certain Color Intraoral Scanners and Related Hardware and Software

INVESTIGATION NO: 337-TA-1091

HEARING DATE: 9-19-18
LOCATION: Washington, DC
NATURE OF HEARING: Hearing

I hereby certify that the foregoing/attached transcript is a true, correct and complete record of the above-referenced proceeding(s) of the U.S. International Trade Commission.

DATE:

WILL!

SIGNED:

Signature of the Contractor or the Authorized Contractor's Representative

SIGNED:

Signature of Proofreader

I hereby certify that I reported the above-referenced proceedings of the U.S. International Trade Commission and caused to be prepared from my tapes and notes of the proceedings a true, correct and complete verbatim recording of the proceedings.

SIGNED:

Signature of Court Reporter